THE

FARMER'S MAGAZINE:

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(No. XXXVIII.)

BRANCH I.

ORIGINAL COMMUNICATIONS.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the first Principles of Agriculture.

SIR,

As every trade and profession must now-a-days have its axioms, postulata, or first principles, in order to give it a scientific dress among other crafts, it is highly reasonable, that the art of agriculture, which is now almost completely reduced to a science, should also be permitted to assume its first principles. Without the knowledge of first principles, nothing can be expected from any of the practitioners of agriculture worthy of attention, their practice being merely a copy from that already established, if not some gross deviation perhaps from the beaten track, by means of some erroneous idea of their own conceiving. Men, acquainted with first principles, will never deviate from them, while they find them correct: perhaps they may try some experiment consistent with them, and succeed. This, then, is the foundation from which we are to expect a rational system of agriculture, adapted to all the varieties of soil, climate, and seasons, with which it must ever be connected.

It is true, that, by means of great attention to, and a careful and judicious imitation of, good farmers, a man of mean talents is sometimes known to make a tolerable figure in this line.—He may raise good crops; and good crops are no bad criterion of good farming. Indeed, a man, otherwise a blockhead,

at least one who has no notion of first principles, often excels those who adhere to them with scrupulous exactness; but this must be only where the knowing man wants the talent of strict application. This talent is an essential requisite for a farmer; indeed it is indispensable in every occupation where success is desired.

The general principles, upon which the success of agriculture depends, are,

1. Without draining wet land, no improvement.

2. Unless land thus *drained*, is *properly cleaned*, the object of draining is frustrated, and that in proportion as this operation is executed.

3. Manures will always fail in producing the desired effect, in proportion as draining and cleaning are neglected.

4. Early sowing always produces shorter and stiffer straw than late sowing, and that in exact proportion to the times, when not affected by extraneous circumstances.

5. The various species of seed-corn are adapted to various soils, situations, seasons, and other circumstances.

6. Picking and propagating the best heads of the most approved kinds of grain and seeds, is the surest method of preserving them undegenerate.

Draining.—This article has been amply discussed by able hands, and Elkington's mode of draining is universally known. Almost every field has its own peculiar circumstances; and the general idea of intercepting the spring is an established principle in this art. But sometimes, when there is not sufficient descent to allow the drain to be cut as low as some deep sand or water gravel, where the springs lye, a few pits (to be afterwards filled with stones), or some holes by the boring irons, will have a surprising effect in raising the water into that drain, otherwise too ebb to reach the springs, and thereby carry it off. It is not my design, in this place, to enter into the minutiæ of draining, but to introduce it as a first principle in farming.

Without draining, no improvement.—Without it, no other operation can be effectual to the end proposed. When land is gorged with water, it cannot be cleaned. No labour is sufficient to do it, except in a very uncommon drought;—in some soils, not even then: and when land is not clean, it is impossible to suppose that dung, lime, or any other kind of manure, can have its full effect. Dung will promote the natural grasses more than any kind of grain which may be sown; and these, although the land is sown with artificial grass seed, will still thrive, and render the ground completely fit for a summer fallow immediately after dirty lea oats.

Cleaning.

Cleaning.—This article requires the farmer's constant attention, and by this alone can be rendered effectual. Early ploughing is of much importance; and it is impossible to be too early at summer fallows, when spring sowing is over. As I at present speak chiefly of land in the second stage of improvement, it must not be considered so clean as in future it may be expected. We shall suppose the land of a free nature, but extremely dirty by means of its late moist state previous to draining; and that it has been capable of carrying one or two crops of oats, in order to reduce its surface sward; and is now under summer fallow. Every farmer may plough to his own mind, according to the nature of the soil, and the grass he has to destroy: but, in general, light ploughing is sufficient to kill grass, which generally runs near the surface; and then, before the manure is applied, a strong furrow is of much use, to mix new earth with the dung. At same time, some soils will not admit of a strong furrow, unless in the spring, before the moisture is exhausted. In such situations, harrowing, rolling, and gathering grass roots frequently after every ploughing, is essentially necessary; but it is not my design to teach either ploughing or harrowing.

Manures.—Neither is it my design to treat of the nature and properties of manures, and how they operate upon land, so as to produce better crops;—whether by communicating to the soil the vegetable food which they contain;—whether by enabling it to attract nourishment from the atmosphere,—or by enlarging the vegetable pasture which it contains,—or by dissolving that which the soil already contains, so as to prepare it for entering the roots of plants. These are philosophical inquiries, not essentially connected with the present business. Upon this subject, there are various theories, some of which are extremely rational, and others extremely absurd. Concerning the salts, which are an essential ingredient of dung, it is certain they cannot evaporate; but the oil and watery parts certainly will. We have a good illustration of this hypothesis, in the operation of the sun upon salt water. In warm climates, the sun exhales every thing from salt water, when exposed to its influence, except the salt itself. In this way the inhabitants of such climes obtain that commodity. It is even gathered upon rocks, which the sea has abandoned after lodging a part of its water upon their exposed surfaces. But, when exposed in a more equal and regular manner, on an even surface, it is much sooner and more easily obtained.

When dung is carried to a field of summer fallow, and spread out green (as it ought to be), till the act of fermentation has completely ceased, the oils must evaporate. But, as experience

teaches us, that no material difference can be discerned between that which has been spread and that which has not, we must conclude, that the oils become fixed as soon as the dung dries; and that the essential qualities of the dung are thereby preserved, and ready to exert themselves as soon as mixed with the soil.

Early sowing produces less straw than late sowing, and that in exact proportion to the times (cæteris paribus).—The knowledge of this principle, which has not been discovered, at least not attended to, till within the last twenty years, is of much importance to the farmer. Before it was known and practised, the hazards of sowing land in a very high state of cultivation was very great. Oats or barley sown in such condition, at the usual period of seed time as formerly, viz. oats, late in March, and barley about the term of Whitsunday, would have been often entirely ruined by being too strong. English barley (commonly from Lincolnshire) and Dutch and many other early kinds of oats, were adopted without changing the time of sowing: and as these have a tendency to produce shorter straw, they were found of much advantage in securing a full crop without lodging. But it is found that any of our oats sown early, produce a shorter and stiffer straw, which has the same effect. Early oats, however, are still much in vogue. The Lincoln barley is almost out of repute. It is well known to some farmers, that the common Scotch barley is the best substitute for it,—as, when sown early, its straw becomes shorter, much stiffer, and less apt to lodge. Potatoe oats are a new species introduced within these very few years; and are said to be natives of South America. It appears they were first imported into some of our Midland counties of Scotland, in a quantity extremely small; and that they obtained that name from the circumstance of their arriving in a *package of potatoes*. This is a valuable kind of oats in point of meal, yielding two to three pecks per boll more than the Angus, which, in every other respect, we reckon our best oats. They appear to be again losing ground in the estimation of some people. They are more apt than any other kind to keep the soil, like wild oats, and thereby to annoy the succeeding crops. It seems to be apprehended that, were they to be frequently shaken and ploughed in dry, that they would be as great a weed too. They seem to have another disadvantage, which, in the present circumstances of our labour, is not a small one. They ripen along with the wheat; and that article being now more than ever the chief object of the farmer, it is in danger of occasioning very serious consequences as to the timeous cutting of that crop. Potatoe oats are also extremely apt to shake, and seldom fail to drop in shearing. All kinds of early oats are fit only for fine land, or land in a high state of cultivation; but upon inferior

inferior land, they are the best, when a bad season has thrown the seedtime too far back for common ones. Blainsley oats are our native early, and have a finer meal as well as finer straw; but they seem mostly out of favour at present. These several varieties of oats and barley afford the farmer great advantages in securing his grass-seeds, as well as his corn crop, in certain seasons and situations.

As to spring wheat, the dwarf kind, which is known to produce short straw, and is an excellent flouring kind, is also advantageous in the above circumstances; and as it has a natural tendency to produce short straw, it ought certainly, upon rich soils, to be preferred in winter.

Picking out the best heads of the most approved grain, is the best method of preserving the species from degenerating.—It must be evident to every one, that grain has a constant tendency to degenerate. But whether its species suffers or not, it must, by a thousand circumstances, be so blended and mixed with other kinds, and even with different grain, that it requires frequently to be renewed by picking and propagating the best heads. This is found by experience to be the surest method of preserving the grain; and so different is the produce of the earliest and most vigorous ears from that of the poor diseased ones, that it has generally obtained some name to distinguish it from that even of its own kind. A farmer in East Lothian, (a Mr Hunter) some years ago found, in a cold, bleak situation (Coldingham muir), a very fine looking vigorous head of wheat; which, being ripe at a period earlier than might have been expected from its situation, he brought with him; and having repeatedly sown its produce, has at last furnished seed to a considerable part of that county, and even to farms in many a distant county. It is an excellent kind of wheat; being considerably earlier and more prolific than any kind we are yet acquainted with. Mr Hunter has great merit, not only for his original attention to this article, but for the unremitting vigilance bestowed in preserving it free of mixture. It is now distinguished by the name of *Hunter's Wheat.*

These hints, Mr Conductor, may perhaps be of some use to farmers who are only about the beginning of their agricultural pursuits. They may cause a little reflection, and occasion rational experiments, which may confirm, in their mind, the utility of such first principles, upon which they were made.

If you think it can tend to any good purpose, you may put this into some corner of your Magazine, that it may be seen by those who chuse to read it; otherwise, let it be condemned to the flames: or, even should the subject be anticipated, which I know nothing of, being but an occasional reader, let that condemn it.

I am, &c.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR,

IN your useful work for May 1806, I communicated a few observations on the inutility of smearing sheep with an ointment of tar and butter; and now beg leave to offer some remarks upon the answers made to that communication.

Possessing a sheep-farm situated in a very high and cold tract of ground, (from 800 to 1000 feet above the level of the sea,) I designed, ere this time, to have given you the result of some experiments on the subject of salving; which communication, however, I must yet defer.

Suffice it at present to say, that I have satisfied myself that the practice of smearing is useless, even in my high climate; and I shall beg leave to state one fact from which, in part, my conclusions are drawn. I purchased, in summer last, two scores of Cheviot wedders, which had been smeared as all my Highland or black-faced stock used to be. These Cheviot sheep I did not smear, notwithstanding the clamour of some of my neighbours, who predicted, as a consequence, the ruin of their flocks, as well as of mine by the scab. My wedders are, however, every one of them alive and in good health, and their wool is in most excellent order, although a more severe winter for the flocks in my neighbourhood has not been experienced these forty years. I did, it is true, rub them with tobacco liquor, which is easily and cheaply done, and effectually destroys all vermin that affect sheep.

Your correspondent S. L. A., who answers my observations in November 1806, (vol. 7, page 427.) just takes up the ground of tarring being a panacea for curing every disorder to which sheep in high climates are incident. That remark I endeavoured to undermine, by comparing this salve to a *nostrum* that *cures all diseases, if curable.*

He indeed does not mention Braxy by name, in the catalogue of ills that this nostrum is a cure to; but he has a sweeping clause that includes this disease and a thousand more. 'Again, (says he) smearing is a mean of continuing the vigour and strength of sheep unimpaired, for some years longer than would otherwise take place if kept unsmeared.' What more does any quack pretend, than to add to his patients a few more years of vigour and strength unimpaired!

The particulars that S. L. A. condescends on are, that smearing keeps sheep on mountainous grounds dry, warm, and free from scab and lice; and is, moreover, beneficial to their wool.

I have already made some observations on all these topics; and I would here be inclined to enlarge them, were I not seriously held

held in check by the concluding knock-down argument of your correspondent, who says, that the long continuance of the custom of smearing, from time immemorial in this island, and the practice of the ablest storemasters, are irrefragable proofs of its utility. Very true—and the custom for time immemorial in this island, and the practice of our ablest kings and lawgivers in burning old women suspected of witchcraft being also irrefragable proofs of its utility, he may, upon the same principle, be for continuing this practice likewise.

I shall now consider what Mr S. L. A. says on the utility of smearing. After alleging that smearing keeps sheep dry and warm, he observes, that tar and butter, being of an unctuous, oily nature, resist the rain in the same manner as the feathers of water fowls continue dry even when swimming. For this reason, then, a dunghill hen, when she happens to be the stepmother of a brood of ducklings, may be tried to be rubbed with tar and butter, and thus becoming, by the art of man, a water fowl, she will no longer stand hesitating on the brink of a pool, but boldly follow her brood, and so change her natural element, precisely as the superior genius of a Dædalus or a Wilkins, by clapping a pair of large wings to a man's shoulders, could make him mount the aerial fluid, and vie with the eagles of the sky.

But further, my respondent adds, by way of illustration, as every pile of wool from its root to its top, is anointed with this unguent, and as the wool grows in a hanging position, like the thatch of a house, so it accelerates the rain from the animal without drenching it to the skin, which would unavoidably be the case if unsmeared.

Now, this suggests naturally an elegant improvement to thatched roofs, which, if they were smeared with tar and butter, there would not be one for ten of them that would let in rain.

There is one thing, however, that puzzles me not a little, when thinking of this subject, and which no doubt Mr L. A. can easily explain. Those useful articles called Umbrellas, when expanded, are in a hanging position, like the thatch of a house, or the fleece on a sheep's back. Now, I remember, when they came first to be used in this country, they were universally made of oil-cloth or wax-cloth, and perhaps some of them of tarred-cloth, being all covered with an unctuous oily matter, to accelerate the rain, and prevent its drenching us to the skin. But at present they are all made of silk, cotton, or woollen cloths, unanointed; and how the rain does not run through them, is past my comprehension.

I most cordially agree with S. L. A. that any cover that will prevent wetness must contribute to retain warmth. But although I were to admit that smearing acts as a preventive of the scab, and

deſtroys cades, it remains to be proved that tar is the cheapeſt or moſt effectual cure for theſe ills; which S. L. A. has not attempted to do, by contradicting my former ſtatement in favour of tobacco liquor.

The next poſition that S. L. A. defends, and perhaps the moſt important of the whole is, that 'want of ſmearing deteriorates the quality of the wool.' But as I am not ſufficiently acquainted with the wool-ſtapling or manufacturing buſineſs of the fleece, I must refer this matter of diſpute to a very eminent late publication on the ſubject of wool, by Mr Luccock, wool-ſtapler; wherein that author (p. 333.) expreſsly ſtates—

'The practice of laying wool, with a dirty mixture of tar and butter, was generally adopted in Northumberland; but the late attention to ſheep-farming, and the judicious experiments which have been made in this angle of the kingdom, have ſhown that ſmearing is not, as was ſuppoſed, abſolutely neceſſary either to the health of the flock or the good qualities of its fleeces. Among farmers who reſide in the lower ſituations, and who keep flocks of the long-wooled ſheep, the practice is almoſt laid aſide; and many ſhepherds, even upon the hills, have omitted it without detriment to the ſtaple.'

P. 131.—'Tar is a dirty and tenacious ſubſtance, adheres to the wool ſo cloſely as frequently to corrode the hair, rendering the part to which it is immediately applied, thin, rough and weak.

'When affected by the filthy cuſtom of ſmearing, the pile is leſs capable of acquiring the ſofter and more delicate tints, which it is often deſirable to communicate to the different articles of the woollen manufacture. A portion of that dirt, which it obſtinately retains through every previous proceſs, is diſſolved among the ingredients in the dyeing vat, and diſqualifies them from communicating that vivid luſtre, which they would have afforded to a purer wool, even though the artiſt ſupply his pans with a much larger proportion of the colouring materials. In the ſubſequent proceſſes of the manufacture, this filthy ſtaple produces much greater inconvenience, and it is ſubject to more conſiderable waſte than the purer pile, even though we make every reaſonable allowance for the weight of dirt which it obviouſly contains. In the jenny and the loom, the machines employed in ſpinning and weaving it, more dexterity and patience are required of the work-people; and the cloth which it produces is inferior in its quality, and ſmaller in quantity, than might have been obtained from the ſame pile in a pure ſtate.'

As I preſume your correſpondent S. L. A. is not a wool-ſtapler, I hope he will bear the lecture which Mr Luccock gives him, with deference and reſpect; and in that ſtate of mind, I diſmiſs him, to

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ſay a few words to my other antagoniſt, who ſubſcribes himſelf, in your Magazine for February 1807, (Vol. VIII. p. 93), *A Border Farmer*.

This perſon, when he attempts to diſplay knowledge, ſhows ignorance; and, in the place of wit, puts, what no doubt is the neareſt it he is acquainted with, ribaldry. That this falſe coin ſhould have been offered to the acute Conductor of the Farmer's Magazine, I do not wonder; but I wonder much that it has been received.

This pretended Border Farmer, not knowing that Tick is the claſſical word for the animal that is provincially named a Cade, or that *hippobosca ovina* is the Linnæan name of it, tells us that ticks are bred in the ground. Not knowing that it is a proverb among ſheep-ſmearing farmers, that ſometimes a ſmearing is as bad, that is, as fatal, as a ſtorm; he ſays he never heard of any loſs by death, or the health of ſheep being injured by ſmearing. Not knowing what Mr Luccock, or any other intelligent wool-ſtapler has ſaid on the ſubject of tar deteriorating the wool, he ſays that the wool-ſtaplers like tarred wool as well, if not better, than the unlaid. Not knowing that a ſheephouſe capable of containing fifty ſcores of ſheep, may be erected at the ſmall expenſe of thirty pounds, and that the ſum of one hundred pounds, judiciouſly laid out in ſheephouſes, may afford ſhelter to a flock of a hundred and fifty ſcores of ſheep, he ſays, no houſes are or can be erected to ſhelter the thouſandth part of the ſtock bred on the Border Hills. Not knowing that Highland wool, which he characterizes as requiring ſix laid fleeces to make a ſtone weight, is ſold at from 6s. to 8s. per ſtone, he ſays, that he ſuppoſes the laid wool is ſold at 36s. and the unlaid at 38s.; and that the wool-ſtapler is ſo wiſe as to give the ſmearer a profit of 9d., being more than half the value of the fleece, for the weight of tar that is upon it. Who could be deceived ſo far as to believe that this writer is a Border Farmer?

Edinburgh, 1807. A. S.

[The above Paper has been longer delayed than we intended; but the delay enables us to accompany it with the following additional obſervations on the Smearing of Sheep, which we inſert with ſatisfaction.]

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR, *22d April*, 1809.

IN addition to my former papers on the subject of salving sheep with tar and butter, I beg leave to state, that after trying successfully,

successfully, by degrees, to lay aside the practice of smearing my mountain flock of sheep, I last year gave it up almost altogether. Indeed, the only sheep of my flock that were tarred last winter, were the hogs, or young sheep, and these very slightly.

My whole ewes and wedders, consisting partly of the Cheviot breed, but mostly of the black-faced sort, to the amount of between twenty and thirty scores, were rubbed in November last with tobacco liquor only, for the purpose of destroying the cades or ticks (*Hippoboscæ ovinæ*), which this liquor effectually kills. And notwithstanding the unparalleled severity of last winter, my flock were more healthy than usual.

Exclusive of the hogs which were smeared with tar and butter, and of which sort several died this spring; and exclusive of a few scores of old sheep, that were set apart into an enclosure to be fed with turnips, there has, of my mountain flock, which were left unsmeared with tar, died, during the period of winter and spring, only one ewe from accident, and another from disease.

I learn also, that some of my neighbours, probably induced by the present high price of tar, have begun, last winter, to smear their flocks of sheep with whale oil, without any other mixture; and they say it kills the cades, and is beneficial to the wool; and that no more of their flocks have died since giving up the tar, than was usual in such seasons as this.

I beg leave to remark, that the smearing with oil costs about threepence each sheep; whereas the rubbing with tobacco liquor costs no more than about fourpence for the salving of a score of sheep; which is surely a matter worthy of some consideration.

Give me leave, however, to observe, that on my farm I have erected a sheephouse capable of containing my whole flock, on what has been accounted by many who have seen it an excellent plan, and at the moderate expense of between 20*l.* and 30*l.*; and I have also a plentiful supply of meadow hay for my sheep.

I have further to remark, that last autumn I did not wean any of my lambs; and whether it arose from that circumstance or not I cannot tell,—but it is certain I did not lose one of my lambs from the sickness in the end of harvest, although most of my neighbours suffered severely from this disease; and my shepherd did not think my ewes were in any degree the worse for this practice.

Last year, also, on account of the great severity of the weather during the month of April of the two former years, by which a large proportion of the lambs, being yeaned in the midst of snow, died; and on account of the general severity of the weather, and consequent want of food for the ewes in this climate during the

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month of April, which is the ordinary yeaning season of the mountain sheep of Scotland, I judged it expedient to keep my rams secluded from the ewes, in an enclosure, till the beginning of December, in order that my ewes might not yean till the month of May. No doubt, there are some disadvantages to be expected from this practice, of which I am aware; but after a fair trial, I shall communicate to you the result.

A. S.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

The Inventor of the Thrashing Machine.

SIR,

IT is a matter of astonishment to every true lover of his country, that public merit often sinks into the grave without reward. Very probably, the inventor of the system of tactics which has been the means of fixing our naval superiority, will leave this world without having any substantial mark of public favour bestowed upon him, and must rest contented with the universal admission of his merit and great services; which is indeed a great reward to a man of a great mind. But it is the duty of the public to encourage talents which are devoted to its service, and to reward their exertion by something more than mere words. There is a venerable person in your neighbourhood, to whom the country is perhaps as much, if not more indebted, than to the inventor of the present system of naval tactics. Has not MR MEIKLE improved agricultural tactics, by the invention of the Thrashing Machine, to a degree which renders the improvement of the country impossible to be calculated? If any man can judge in this matter, you can. And are the farmers and proprietors of Scotland to suffer this old man, now above ninety years of age, to finish his career, without having some proof of the sense which the nation entertains of his merits? I beg, Sir, that you will assist in rousing that spirit of liberality well known to exist in the country. I therefore propose that a subscription shall be opened, in order to afford an opportunity to proprietors and farmers to testify their sense of obligation to Mr Meikle, by presenting to him a piece of plate, or some other thing. I think that the secretaries of the different clubs of farmers should be appointed to receive subscriptions in the several counties; and that the county of East Lothian, where Mr Meikle resides, should have the chief management. If the subscription shall go on as I expect it will, I shall propose what I think should be given to Mr Meikle, by the committee of management. I beg you will give this a place in the earliest Number of the Farmer's Magazine; and

and if my proposal is approved of, it may be mentioned to your neighbours; and before the next Number is ready, you may be prepared to announce the appointment of a committee, and the names of the gentlemen composing it.

I am, Sir, your most obedient servant,

27th March, 1809. ——— A PATRIOT.

NOTE.

THE Conductor highly approves the proposal of his patriotic correspondent, and will cheerfully lend his aid towards carrying it into execution. It is an old saying, that a begun turn is a half ended one: Therefore, if the respectable gentleman who favoured us with the above communication, will form a plan for opening a general subscription amongst agriculturists to reward Mr Meikle, it shall be announced in the next Number of this Magazine. We are quite aware, that some people entertain doubts whether the Thrashing Machine was invented by Mr Meikle; though we are satisfied that there is not the slightest foundation for these doubts. Thrashing machines unquestionably had been attempted by others previous to the erection of the one invented by Mr Meikle; but none of these machines were perfect, or capable of separating corn from the straw in a satisfactory manner. By Mr Meikle's machine, the arduous task of thrashing is performed in the most complete manner; to the great benefit of the public, and advantage of every one concerned in the art of agriculture, or possessed of territorial property. N.

FOR THE FARMER'S MAGAZINE.

Cursory Remarks on the Bankrupt Laws.

THE vices of men seem not to be measured by their pernicious consequences to society, but according to the rank of the persons to whom they are in a manner peculiar. While the vices of the lower ranks are viewed with abhorrence, and punished with the utmost severity, those of the higher ranks are passed over with lenity, and scarcely reflect any disgrace on such as are guilty of them. The stealing of a sheep, for instance, is by law punished with death, because it is a species of crime peculiar to the lower ranks, (which indeed is not much to be wondered at, considering the hardness of their lot); and a person in high rank suspected of such a crime would be indelibly disgraced, though it might be alleged in his defence, that he was driven to it by the pressure of want. Yet this gentleman thief, by a different course, might safely enough have robbed his neighbours of thousands of pounds. We shall suppose that he is a merchant; that he has ruined his affairs by extravagant speculation and extravagant living, (the

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two go hand in hand); that he has resolved to stop payment; nevertheless, that, to swell out his composition, he goes to his neighbour, an honest unsuspecting man perhaps; worms himself into his confidence, purchases goods to a great amount, and then proclaims himself bankrupt. What is the result? That he is still a man of honour, and has the effrontery boldly to challenge the world to accuse him of one dishonest action; that he is admitted into all companies as well as formerly; can even scoff at the mean way of living of some of his creditors; and is frequently the loudest in company in condemning the knavery of the poor, and expressing surprise at the lenity with which it is treated. If any one censure the act we have mentioned, his mouth is stopt instantly by the vulgar observation, 'that people in such a situation do many things that at other times they abhor.' Situation, however, is never heard with temper, when urged in favour of the lower ranks. Whence can arise this miserable perversion of all sound principle? Only from the political helotism in which the lower ranks are held.

The tax upon the whole society, in consequence of the frequency of bankruptcies, seems not to be understood; it is, therefore, a subject worth inquiring into.

We shall take the article of cotton, and endeavour to ascertain how much the price of the cloth is raised by this means to the consumer. The American merchant, knowing that he is liable to losses by the failure of those to whom he sends his cotton in this country, lays one and a half *per cent.* upon it, to cover any losses that he may sustain - - - - 1½ *per cent.*
The merchant here does the same to the spinner 1½
The spinner to the weaver the same - - 1½
The weaver to the shopkeeper the same - 1½
The shopkeeper has innumerable bad debts, and many of them being too small to afford legal expenses for their recovery, he is obliged to lay double *per centage* on his goods on that account - 3

9 *per cent.*

Thus, the honest consumer, besides paying a profit to every one through whose hands the article passes, has nine *per cent.* to pay in consequence of others living above their incomes! Nor is it on this article alone that he is so taxed;—all articles are taxed in a similar manner. That we have taken this insurance of bad debts low, must be allowed by all who are in the least acquainted with the subject.

The honest merchants and manufacturers, notwithstanding this insurance which they exact, often suffer prodigiously—by extravagant

vagant knaves and fools commencing business in the same town, and in the same line, who live in what is commonly called style, —and, by underselling, do much business; so that the others are obliged either to retire altogether from the market, and then it is no easy matter to get a footing again,—or they must submit to the prices of their rivals, how much soever they may lose by it. In the latter case it becomes merely a trial of bottom: the extravagant probably soon fail, and then the honest and industrious expect to make up their losses by the increased prices of goods from the want of competition. But alas! some connexions of their late rivals, with whom they have dealings, fail likewise, and involve them to a great amount. This was unexpected; their bills become due; the provision made for them is gone; and therefore, to meet their payments, they are obliged to sell the greater part of their goods at what they will bring. In the mean time, it is likely that some upstarts, without property, knowing how mildly they shall be dealt with in the event of failing, begin business; setting their all upon a cast, they buy up the goods, and perhaps reap the fruit of their predecessor's failure. In this way the honest, sober, industrious man, is too often ill rewarded for his pains; he is despised for the plainness of his living, by those who riot at their neighbour's expense, and not unfrequently by the very persons by whom he has suffered; his domestic peace, too, is destroyed by the continual reflections of his wife and children, that they are not kept like other people.

It cannot be denied, that the consumers are, for the time, benefited by the overstrained competitions that we have been speaking of; but then they pay smartly for it afterwards. The good dealers being driven from the market, those who remain cannot bring their articles into it but at a high price, in consequence of the risk that people run in trusting them. This of course falls upon the consumers.

But the greatest evil arising from frequent bankruptcies, is the ruin of the public morals. If we look around us, we shall find that the really wealthy are, for the most part, either desperate speculators who have been fortunate, or men who, by laudable industry and parsimony, and by detestable cunning, have acquired some property, and who then devote their whole time to hunt after bargains; that is, they are ever on the watch for people in necessities, whom they get into their toils, and wring their property from them in various ways,—such as, by advancing money on goods, and then taking them off at an undervalue, when the poor wretch is unable in due time to relieve the advance. Wealth begets respect; and therefore, a set of desperate gamblers, and crafty knaves, without one good quality to recommend them, are, even

even while despised, admitted into all companies. Of course, in the outset of life, the young man is taught to desire wealth, without scrupling the means of acquiring it; to love splendour, without attending to his ability to support it; and, consequently, soon becomes a compound of avarice and prodigality—one of the most depraved characters in nature.

If such evils arise from bankrupts, who can, without indignation, see the abilities of such as Fielding and Sheridan prostituted to defend them? or, what shall we think of a Prime Minister, who has the impudence gravely to tell the nation, in reply to those that urge the impolicy of his measures, from the bankruptcies they have occasioned, that frequent bankruptcies evince the flourishing state of the nation? Fielding says, poor Booth was mercilessly dragged to jail, because he was wickedly unable to pay his debts; but the wickedness did not consist in his being unable to pay his debts, but in contracting debts which he well knew were beyond his ability to pay. He indulged, says he, in a few little elegant expenses, and that brought upon him the severest displeasure of his creditors; and very justly it did so. Many of his creditors, no doubt, were obliged to deny themselves any of those little elegant expenses, that they might make some small provision for their families; and it was certainly hard, indeed, to see that taken from them by the unjust luxury of another. The School for Scandal is, in many respects, one of the first comic productions on the stage; but it is immoral to the last degree; and vice is decked out in such colours, as to have the most injurious tendency to youth. Joseph is universally detested; yet, such is the author's art, that there are few who do not love Charles. Let us coolly compare the two characters, and we shall find ourselves at a loss which to prefer. Joseph was artful, close and malicious. In artfulness, Charles could not be his inferior, if we reflect on the many tricks that he must have resorted to, to get into the books of poor tradesmen. If he was not equally close, we must remember, on the other hand, that Joseph paid his debts. As to maliciousness, I do not know what term to apply to that embrutement of the mind, which can lead a man to mock poor tradesmen who have suffered by him. But Charles was generous. Was it, indeed, generosity to rob the industrious of their hard earned pittance, and give it to the idle and profligate? I have judged it right thus far to expose these authors, as I am convinced that their writings have had the effect to blindfold many well meaning people, as to the real moral turpitude of contracting debts which one cannot pay.

Those who allow the truth of the foregoing remarks, must also allow that the present bankrupt laws ought to be completely altered;

tered; and that, as the man who contracts a debt of twenty shillings, which he knows he cannot pay, is equally guilty with him who steals that sum in the vulgar manner, the punishment should be the same. The taking away the life of a man for stealing a few pounds, has long appeared, to humane comprehensive minds, a most unjustifiable cruelty. Were bankrupts put upon the same footing with common thieves, many would come over to that way of thinking, and a milder punishment would soon be substituted. What the punishment should be, it does not become me to determine. Let it only be established, and let all bankrupts suffer, who cannot prove to their jury, on trial, that their failure was owing to inevitable misfortune, not to any misconduct on their parts. Such accounts, as are generally rendered, ought to be rejected with contempt. One says, I have lived at very little expense,—look at my books. The question should be, did your income allow you to spend so much? No;—but my station required it. Your station is nothing to us—the jury should return: we look to your income. Another offers as his plea, that the speculations which he entered into had every chance of success; but, owing to some unforeseen cause, they failed. Since they failed, it would naturally be answered, they had not *every* chance of success. You had no right to risk other people's property, for your gain.

I cannot leave this subject without one remark more. The man who imposes a forged bill upon his neighbour, is hanged for it; but what difference is there, except what the law makes, between this and giving one's own bill, knowing it to be good for nothing?

SOLON.

NOTE BY THE CONDUCTOR.

THOUGH the above Essay, strictly speaking, does not relate to the subject of Agriculture, we have been induced to give it a place for the following reasons. 1. Because it contains sentiments of an original cast, which might be advantageously used, were the principle of the bankrupt laws to be revised: And, 2. Because every farmer, less or more, is exposed to losses when bankruptcies take place; consequently, is interested in the question investigated. It is evident to every one, that fraudulent bankruptcies are too easily passed over in this country; and that the disgrace accompanying a failure in business, is far less than what it ought to be. On these accounts, we applaud the remarks of our ingenious correspondent, and respectfully request a continuance of his correspondence. Would he turn his attention to the preference given to the proprietors of land by the laws of this country, when a tenant becomes bankrupt, we are convinced that his observations would confer a favour upon the public, of considerable magnitude.

N.

TO

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR,

IF you think the following hints concerning the Larch deſerving of public notice, I have no doubt but that they will receive a place in your uſeful Magazine.

Larch has not ſucceeded, in general, ſo well as was expected ſome years ago, from the promiſing appearances then made while young, in almoſt every ſituation where it was planted. Larches have been attacked by inſects, which have been ſuppoſed to be the cauſe of their decay. Although theſe may, in ſome meaſure, have haſtened their decay, yet I do not ſuppoſe they were the entire cauſe of it; becauſe, all the trees deſtroyed, ſeem, firſt of all, to have been in a ſickly ſtate from other cauſes, and of courſe unable to bear the attacks of the inſects. Their punctures, no doubt, occaſioned ſuch a waſte of the juices of the plant, as, when in an unhealthy ſtate, muſt have haſtened its decay. The greateſt miſchief was done in dry ſummers, when the plants were leſs vigorous than in wet or more favourable ones.

I have obſerved in Lord Seaforth's plantations, where the ſoil is tolerably good, or of a kind favourable to the growth of other trees, ſuch as beech, oak, cheſnut, &c. that the larch has done well, and withſtood the attacks of the inſects, except where too thick, or too much confuſed by other trees, and ſo become unhealthy; in which caſe, they have in general ſuffered, even although the ſoil was favourable.

In moſt inſtances, for the firſt four or five years after planting, larches have done well; and, after that term, they either decayed, or ſuffered much from inſects.

It is well known, that ſoil that will afford nouriſhment to a young plant, and where it may even thrive well for a time, is not always ſufficient to afford nouriſhment when it gets older. Thus the plant becomes ſickly for want of proper food, and at laſt may fall a prey to inſects. For inſtance, vegetable mould, and light ſoil, is moſt favourable and kindly for young plants to ſtrike root in; but, after ſetting off in a vigorous and promiſing manner, they ſtop ſhort after a certain time, according to the ſort of plant, entirely for want of proper nouriſhment: this I ſuppoſe to be the caſe with the larch.

It is, in general, between 5 and 15 years of age, that larches have ſuffered moſt; and from the obſervations made, I ſuppoſe, although the inſects had never attacked the trees, that they never would have ſucceeded or come to maturity, (although they might have ſtruggled to live a few years longer, had they not been attacked), becauſe the ſoils in which they were planted, and other circumſtances already mentioned, were unfavourable to the growth of larch trees.

In wet ſoils, or thoſe retentive of moiſture, larches will not ſucceed for any length of time, nor will they ſucceed at all in a poor, thin, dry ſoil; but, though the ſoil is moderately moiſt, and even occaſionally flooded with water, yet if the bottom is not retentive of moiſture, they will generally do well. As a general rule, it may be ſtated, that where the oak and the beech does not thrive, the larch will not come to perfection. On bottoms not wet, and on the ſides of hills and banks, larches generally do well; but towards the ſummit they never ſucceed.

I am, Sir, your moſt obedient ſervant,

M. S.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Notices as to Lucern.

SIR,

IN a piece of garden ground at Laurieſton, near Edinburgh, I ſowed a plat with lucern and red clover ſeeds, in alternate drills, in the beginning of May 1807. Having no corn crop to keep them down, the plants, both of lucern and clover, being a good crop, flowered, and were cut down that ſeaſon.

I had heard that lucern was ſooner ready for cutting than any other green crop for cattle; and I believe it is ſo; for, on 23d May 1808, my drills of lucern were fit for cutting, the plants being 18 inches long, while the plants of red clover were not ſix inches in length.

At preſent, (16th April 1809), the new ſhoots of lucern are in height about ſix inches, while thoſe of red clover do not exceed one inch.

It has been alſo ſtated, that lucern, if cut as ſoon as it riſes to the height of 12 or 18 inches, may afford four or five crops in the ſeaſon. This, I believe, may be alſo true; but I have not yet had an opportunity of trying it properly, having cut it along with the clover laſt year. They were mowed in the beginning of July, when the lucern was three feet long, and ſcarcely arrived at bloſſom; and the red clover was nearly as long, of twice the thickneſs in the ſtem, and in full bloſſom. Of courſe, the clover afforded then moſt food for cattle.

They were cut a ſecond time in Auguſt, and a third time in September 1808; and, at each cutting, the clover was not much behind the lucern in length; and, on the whole, by this mode of management, the clover afforded the largeſt crop of the two.

I ſtill conſidered, however, that the lucern had this peculiar advantage, that it would remain in the ground, and even increaſe in bulk of crop, for the ſpace of ten years at leaſt. Pliny indeed ſays, it laſts thirty years in Italy; while, on the other hand, red clover

clover lasts in the soil, in this climate, only two or three years. But in this matter I found myself mistaken; for the most uncommon severity of the frost of last winter has killed about a third of the lucern plants, so that it is impossible now that this crop of lucern can ever equal that of the red clover.

Although, no doubt, the frost that killed my lucern plants was more severe than has been experienced for 69 years past in Scotland, the thermometer having been, on 22d January last, in some places as low as zero, by which most of the tender exotic plants, exposed in the open air, have been killed, particularly those of the Lauruſtinus, Cistus and Budlea; yet I am hardly inclined to trust that a crop of lucern will hold good in this climate for a period of even ten years.

A crop of lucern is, however, well worth trying by the farmer in any small paddock of deep loam, sand or gravel, near his house, for soiling horses, black cattle and hogs, or as an early food for ewes and lambs.

The seed may be had, of an excellent kind, from Dickson & Co., Shakespeare's Square, Edinburgh.

A. S.

NOTE BY THE CONDUCTOR.

WHAT is stated in the above notices by our respectable and accurate correspondent, supports, in the fullest manner, the opinions we have repeatedly delivered respecting the culture of lucern in this country. Whatever might be the merits of this variety of grass, when cultivated in the fertile plains of Italy, there cannot be a doubt entertained, but that red clover and rye-grass are much better calculated to yield a full crop of hay or green herbage to the Scottish farmer, than he can procure from lucern, or other exotic grasses. N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Thoughts concerning the Establishment of an Academy at Inverness, for preserving the Gaelic Language and Pipe Music.

SIR,

OBSERVING lately, in a northern provincial newspaper, a plan proposed for instituting, at Inverness, a branch of the Highland Society of Scotland, and for requesting his Royal Highness the Duke of Sussex, as Earl of Inverness, to patronize and place himself at the head of it, for the purposes *(inter alia)* of preserving and cultivating, by the establishment of an academy there, the Gaelic Language and Pipe Music; I was led to

reflect on the benefits likely to accrue to the Highlands, by the eventual adoption of such a plan; and as the subject appears to me to be intimately connected with the general improvement and prosperity of that part of the country, I conceived that it was not inconsistent with the plan of your Magazine, now beginning to be read in the Highlands, to request the insertion of a few thoughts on the subject, from one who has reason to have the welfare and prosperity of the Highlands much at heart, by being possessed of a considerable property there, and which, he conceives, would be so far from being benefited by such a scheme, that he is persuaded its general improvement would be thereby much retarded.

Often, Sir, have I offered to my little Highland tenants the perusal of your useful publication, with the view of inducing them (by the precepts and details which it contains) to alter their present wretched system of husbandry, and as possessing their farms, for the most part, on leases for life, or for nineteen years, thereby to better their own condition; but, alas! their reply always has been, that they could neither read nor understand English; and that, consequently, they were in a manner cut off from all such means of improving themselves in the modern style of farming, and equally deprived of the satisfaction of reading the weekly newspaper I had caused to be sent among them, with the view of disseminating useful information.

It is well known, that many of the principal Highland proprietors of the present day, do not understand a word of the Gaelic language, nor show indeed any inclination to acquire it. The consequence is, that their tenants are deterred from representing to them personally the grievances they sometimes labour under, and rather quietly endure what they have to complain of, than expose themselves to the dreaded enmity of an interested bailif or ground-officer, the interpreter commonly made use of upon such occasions. And I presume, Sir, you are aware, that the disadvantage attending those who understand no language but Gaelic, cannot be less felt when they have occasion to attend a court of justice, where neither the Sheriff nor his substitute are acquainted with that language.

Manifold, in short, are the disadvantages resulting from this state of things in the Highlands, not to mention the effect it has of continuing a bigotted attachment to old habits and customs, the vestiges of feudal slavery, which serve only to impoverish the Highlanders, and to mark them as foreigners among their fellow subjects of the South.

In perusing the plan now in agitation, for *teaching the Highlanders their own language*, as detailed in the weekly paper above alluded

alluded to; and reflecting on our having already within the island two Highland Societies, one of which dispenses, annually, ample rewards for the cultivation and preservation of *Gaelic poetry*, *Gaelic piping*, *Gaelic dancing*, &c.; I was at a loss to conceive what call or occasion there could be for the institution of a *third*; or what charms pipe music possessed, to stir up greater courage in men, and make them fight better, than a well-assorted band of clarinets, French-horns, trumpets, and bassoons? But a recollection of the maxim, '*De gustibus*,' &c. put an end to my cogitations, and sufficiently reconciled that point; and this was confirmed by a scene which I witnessed last summer in the theatre at Edinburgh, at what is called the '*Annual Competition of Pipers*,' to which I was induced to accompany a Highland friend of mine and his two daughters, then residing at Edinburgh for their education. Although I could discover in the audience no great symptoms of delight at the musical part of the performance, matters took a very different turn, when, upon laying aside their pipes, the brawny competitors, decked in their genuine Highland costume, *set to* at a reel. The capers, flings, and whirling exertions of the dancers, was an *exhibition* that seemed highly entertaining to the spectators; and my friend's two daughters, whom I perceived enjoying many a hearty *titter* behind their fans, returned home from it with looks, I thought, of considerable edification.

But to conclude this epistle.—What I seriously hope to live yet to see, Sir, as a real well-wisher to the prosperity of the Highlands, is, the Gaelic numbered among the dead languages, and a better provision made, through the means of the Highland Society, for our Highland parochial schoolmasters, (teachers of the English language, arithmetic, writing, &c.) some of whom I have had opportunities of knowing to be at present but very miserably provided for. To the aphorism of one of our monarchs, 'Unus Deus, unus rex, unus grex,' it were to be wished we could add, 'una lingua.' I am Sir, &c.

ANGLICUS.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Remarks on Mr Laurie's Letter concerning Emigration from the Highlands of Scotland.

(Continued from p. 51, and concluded.)

SIR,

IN my former letter, I offered some remarks on a paper inserted in your Magazine for February 1808, mistakenly entitled, 'Hints as to the Means of preventing the Depopulation of the

'Highlands;' and mean, with your permiſſion, to reſume the ſubject, and finiſh the remarks which occurred to me when peruſing that communication. The ſubject being of the firſt importance to the public welfare and proſperity, I truſt you will indulge me with inveſtigating it at ſome length, though I ſhall not unneceſſarily treſpaſs upon the patience of your readers.

'I know,' continues Mr Laurie, 'it is ſuppoſed that the natives will ſtill be retained in different parts of the Highlands in ſufficient numbers to ſupply hands as faſt as improvements in agriculture can take them up. Without diſputing altogether the foundation of this oblique policy, which admits ſo far the impropriety of its own plans, and implies alſo an admiſſion, that the progreſs of improvement muſt now be much retarded;—I would juſt remark, that its advantages must not be overrated. From what we now know of the diſpoſitions of all ſorts of labourers, we muſt lay our account with this, that a competition amongſt employers for a ſupply of hands, not only will raiſe wages to the higheſt pitch, but will actually prevent coarſe and diſagreeable work from being duly executed,' &c.

Now, Sir, in my humble opinion, no further diminution in the Highland population will take place than what the improved system has no occasion for. It is not the proprietors, but the principle of the system which retains the remainder in the country. What they do not perform is no work of theirs.—But be that as it may, how can Mr Lawrie call the policy oblique? He cries out lustily against the depopulation of the country, and is at the same moment angry that a single soul is left behind in the Highlands. If it be bad policy to compel emigration at all, it must be infinitely worse to make it total. If that system be ruinous which forces all to emigrate, there can be no obliquity in that which is desirous of providing employment for those who remain in the country. It is wonderful to me how this gentleman, who laments so feelingly the depopulation, as he calls it, of the Highlands, should be sorry that a partial stop is put to an evil of such magnitude. He must not have attended to what he was saying, or is ignorant of the signification of words. The warmest admirer of the new system never dreamt of turning every Highlander adrift; for he was aware that his plans could not be carried into execution without the assistance of a certain number of these very people. Our economical use of human labour is one of the excellences of that system; and it was therefore a necessary effect of its introduction into the Highlands, that a greater quantity of work should be performed with a smaller number of hands. It being no part of its views to remove the whole Highland population bodily, it cannot, in fairness, be argued, from its retaining a certain number, that it admits of a radical error in

point

point of principle. If it had required a total depopulation at one time, and, when making the experiment, afterwards discovered the necessity of retaining a part, then it might truly be said that the system was erroneous in that essential particular. But as it does not pretend to carry the joke quite so far, but contends merely that fewer hands will do the business than heretofore, Mr Lawrie's censure upon this act of the Highland proprietors, is not just. As little can it be said that the system is bad; for if a smaller number of hands can do as much work now, as a greater number in former times, the country will be benefited at much less expense by the one than by the other. When the demand for hands is greater than the supply, wages will rise; and from the height it is easy to suppose them likely to reach, some part of the country work may lye over till the occurrence of a more favourable opportunity. Such an extraordinary demand, however, for hands, is not instantaneous, but comes by degrees, and in some measure keeps pace with the growing population of the country; which, if it does take place, Mr Lawrie may be assured, from the encouragement that would in that case be held out to multiply the usual proportion between the supply and the demand, would soon come into play. In the continent of North America, he has the pleasure of contemplating a country, (in which wages are higher than in any other part of the world), rising, with the utmost rapidity, to an unexampled height of wealth and prosperity. In that country, from its prodigious extent, coarse and disagreeable work lies over untouched; and no matter although the same thing should happen in this, if a great and increasing population get plenty to do of a more agreeable kind. Indeed it is melancholy to see human labour employed upon the last piece of work that remains for it to perform; for when that is done, the demand for labourers ceases, and wages of course fall. It is much more consolatory to be in possession of a large and inexhaustible fund, and at the same time, an industrious population; for, in that case, wages will be upon the increase, from the circumstance of labour not keeping pace with the demand.

This gentleman is very sanguine in his expectations of the Caledonian and Crinan canals being of the most essential service to the country at large, and turning out a most profitable concern to the adventurers engaged in it. I make not the smallest doubt that these canals, when completed, will do the country, in its line and neighbourhood, as much good as in its present state it is capable of receiving; but I am equally certain, that the speculators never will draw the interest of the money sunk in these great undertakings. The navigation round the north of Scotland and Mull of Cantyre, are so very dangerous, particularly in the win-

ter, as to deter veſſels from making the voyage, and of courſe throw a great impediment in the way of water communication between the north-eaſt and north-weſt parts of Scotland. This difficulty, to be ſure, is partly removed, by the opening of theſe two canals; but I ſhould think that the Great Canal, which joins the Forth and Clyde muſt, for a long time to come, render this additional water communication almoſt unneceſſary in regard to large veſſels;—and the Northern Canals are by much upon too large a ſcale for the mere purpoſes of inland navigation. I by no means, however, condemn the making of theſe canals, whoſe only fault ſeems to be that of coming into the world too early; but merely to moderate Mr Lawrie's expectations as to an early realization of thoſe golden dreams in which he has been pleaſed to indulge himſelf.

'Theſe operations (ſays he) have effected one very important object; they have exhibited the character of the Highlander as a man of ſheer induſtry; and they have furniſhed ſufficient proofs, that he is neither neceſſarily lazy, nor unable to ſuit himſelf to the circumſtances that his lot preſcribes. The landlords may now be ſatisfied, that if they had frankly given him what the Iriſh landholders gave their mutinous vaſſals, a favourable and long leaſe of a farm of ſmall extent, he would long ſince have introduced into his little poſſeſſion the various improvements that he could pick up in the courſe of his peregrinations, in ſo far as they ſuited his own farm, and have levied, by his induſtry in other quarters, the means of effecting his improvements, and, in all probability, have been able to make ſuch offers to the landlord for the leaſe of other property as would have exceeded his competitors.'

I believe no perſon ever aſſerted the Highlander, or indeed any other human being, to be naturally lazy. But we know very well what he may come to be in proceſs of time, from the influence of habit, and what he muſt be all at once from neceſſity. Upon applying this teſt to the inhabitants of the Highlands, we find their habits, from the earlieſt dawn of infancy, hoſtile in the extreme to induſtry; and, being without an object to rouſe them to activity, they paſs their lives in a ſtate of hopeleſs indolence. Were, however, theſe habits reformed, and encouragement held out to the induſtriouſly diſpoſed, no doubt a great and important alteration in their peculiar character would take place. But until the moment of theſe events coming into operation, it is ſilly to expect from theſe people induſtrious habits. Induſtry, it may be depended upon, is always in proportion to the amount of encouragement, and indolence to the reverſe of it. If a favourable and long leaſe of a ſmall farm is to have ſuch magical effects upon the moral and political ſtate of the Highlander, how comes it that the Iriſh, in poſſeſſion of this advantage, are ſtill as ſavage and rude as in ancient times?

times? It is but natural to ſuppoſe, that the ſame cauſe, although operating upon different people, would have the ſame effect. It might have occurred, therefore, to Mr Laurie, to ſhow how the leaſe, which has failed in producing a favourable change upon the Iriſh, was to do the Highlander ſo much ſervice. But I apprehend that, independent of the argument againſt the Highlander, ariſing from the ſituation of the preſent Iriſh, it is impoſſible that a long leaſe can be of any uſe to him, without a previous change in his character and habits. If he enters upon a ninety-nine years leaſe, with all the indolence and want of activity for which he is at preſent ſo remarkable, he or his heirs would leave it, at the expiry of that long period, as little improved, and the country as little benefited by his exertions, as at the beginning. No doubt a leaſe holds out encouragement to a farmer; but unleſs he has the ambition of bettering his condition, that circumſtance alone will not have all the good effects that might naturally be expected from it. Security of poſſeſſion and induſtrious habits muſt go hand in hand, before the full effect can be produced. If my ſtatement be correct, then, it neceſſarily follows, that the Highlander would not introduce into his ſmall poſſeſſion thoſe improvements that he may have picked up in the courſe of his wanderings. But, even if he conducted himſelf with as much propriety as his little eſtabliſhment would admit of, ſtill he would be incapable, from the ſmallneſs of his own practice, to gather improvement in the more diſtant parts of the country. This gentleman ought to have remembered, that travelling for the ſake of agricultural improvement never has been the failing of ſmall farmers; and that this thirſt for knowledge has begun only of late years to make its appearance among the more opulent and enlightened of that claſs. What does Mr Lawrie mean by theſe ſmall people levying by their induſtry in other quarters the means of effecting thoſe improvements? If he propoſes that they ſhould leave their farms, and lend to other parts of the country that induſtry which they ought to have beſtowed upon their own land, in that caſe their poſſeſſions never can in the ſmalleſt degree be improved. It is impoſſible for a man to ſerve both God and Mammon—it is totally out of his power, at the ſame moment, to plough both his own field and that of his neighbour. But, ſuppoſing that the Highlander would have become as induſtrious as this ſmall farm could poſſibly make him, and that he would have introduced into it all the improvements he may have collected in other places, ſtill his ability, ariſing from theſe and all other ſources of wealth, never would be equal to the means of a farmer from Berwickſhire or Eaſt Lothian. If a ſmall farm was to enable him to undertake a certain thing, ſurely a large one would put it in his power to attempt much more. The rule of three in arithmetic will eaſily ſettle this point.

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'If it is intended (continues he) that the Highlanders ſhould be preſerved for the uſe of their country, ſomething much more effectual than any thing heretofore attempted, muſt be done. We know their character and their circumſtances; we alſo know their peculiar value, as theſe are connected together. Let us ſee whether we can preſerve theſe advantages, and improve them by a plan ſuitable both to their character and circumſtances. A deſire for a kind of perſonal independence; an ambition for a certain degree of reſpect and conſequence, ſimple and natural, yet ſteady and becoming their ſphere; attached not only to themſelves individually, and to their families, but to their country, their ſituation, and connexions—theſe are feelings which predominate in the character of the Highlander. Although fond of acquiring money—laborious, patient, and perſevering in induſtry—and more capable of ſubmitting to perſonal privations than any other man, his operations are deſultory: he is averſe to that reſtraint which implies a total ſurrender of his faculties to the will of another; and he is apt to make more uſe of this freedom than is conſiſtent with the ordinary routine of labour. In fine, from a careful examination of the character, circumſtances, and habits of the Highlander, I am ſatisfied that his proper ſphere is either in that of agriculture, or in ſome certain kind of work connected with that, or with domeſtic induſtry.'

The work of depopulation, or, as I have ſaid, of emigration, is nearly over; or, in the language of Shakespeare, 'Othello's occupation's gone.' It is therefore much to be regretted, that Mr Lawrie has been ſo tardy in promulgating to the world his ſovereign ſpecific. Quacks are in general ready enough, as the poor patients pretty well know, with their pills and noſtrums. We in the Lowlands are ſufficiently informed, from hearſay and ocular demonſtration, as to the character and circumſtances of theſe people. It would be uncharitable to deny ſome valuable ingredients in their character; but, good God! is there any thing in their peculiar circuſtances an object of envy? Is not their moral and political ſtate vile and degraded to a degree in the ſcale of human nature? However valuable, therefore, theſe poor people may be in reſpect to character, the circumſtances in which they happen to be placed throw them into the ſhade. Some of the traits of their character I do not very well comprehend; and thoſe that I do comprehend, do not give me a very high idea either of their induſtry or of their underſtanding. Individual freedom and uſeful induſtry are perfectly compatible in the ſame individual; but the independence of the Highlanders, like the ſheep of their mountains, will make but a ſorry appearance at the tail of the plough, or in the flat of a ſpinninghouſe. Their pride is proverbial, and decidedly hoſtile to all ſort of induſtrious employment. What reſpect

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can poſſibly be paid to the herd of a few ſtarved black cattle? or, of what conſequence in the ſcale of ſociety is the ſmall farmer in the iſland of Skye? And yet theſe people will arrogate to themſelves both the one and the other. The Highlander, no doubt, is capable of ſubmitting to much perſonal privation, becauſe his life is but a ſucceſſion of want, from the cradle to the grave; but Mr Lawrie may be aſſured, that if his operations be deſultory, and if he be averſe to the ordinary routine of labour, he will, notwithſtanding of the above qualification, make neither a good huſbandman nor manufacturer. I do not pretend to ſay for what peculiar line of buſineſs he may, *par excellence*, be qualified; but I think it pretty evident, from character, circumſtances, and habit, that he is by no means qualified to diſcharge the duties of the enlightened ſort of farmer, whom I wiſh to ſee eſtabliſhed in the Highlands. If Mr Lawrie had condeſcended upon the particular kind of work connected with agriculture, for which he apprehends the native to be peculiarly qualified, I would have been the better able to judge how far he was well founded. But, perhaps, he had not at that time made up his mind ſo ſufficiently upon the ſubject, as to ſpeak with deciſion upon a queſtion of ſuch importance. I am alſo very much at a loſs to know what he means to inſinuate by domeſtic induſtry. He ſurely does not mean to allude to the great woollen manufactures, ſuch as thoſe of Mr Fraſer, which he afterwards mentions with ſo much complacency. If he means the knitting of ſtockings by the hand, I agree with him that no people are better qualified for that humble yet neceſſary ſpecies of domeſtic manufacture.

Although Mr Lawrie apprehends agriculture to be the proper field for the induſtry of the Highlander, yet he does not give himſelf the trouble of eſtabliſhing the probability, or the means, by which his theory may be reduced to practice. His mind is fired at the contemplation of Mr Fraſer's woollen manufactory at Inverneſs; and foreſees, in that and other ſimilar eſtabliſhments, the rudiments of a manufacture that is, one day or other, to rival its brethren in the South. As he apprehends that the change which is taking place in regard to the agricultural population is to bring that country to an untimely end, I ſhould have liked to have been favoured with a ſight of the arguments upon which he founds the ſuperiority of the aboriginal inhabitants over their more ſouthern neighbours. This point being one of much difference of opinion, it might have been at leaſt decent to have entered a little into the detail of thoſe reaſons which have led him to form the particular ſentiments he ſeems to entertain of the matter.

'I am thus ſanguine (ſays he) with regard to the ſucceſs of domeſtic woollen manufactures in the Highlands, becauſe the advantages

tages which the Inverneſs-ſhire manufacturer poſſeſſes are of the moſt radical kind. Such induſtry may be ſaid to be that of all others which is peculiarly adapted to the Highlander. It infers a kind of independence, while it habituates to very ſevere induſtry and application. It favours his deſire of acquiring wealth by economy and parſimony; and it leaves a ſcope for deſultory relaxation, for contrivance, and for a diſplay of conſequence and ability;—and as a Highland family can live much more frugally than any other; ſo they can bring their induſtry to the market on lower terms than any other, &c. But that advantage, which, of all others, appears to me the moſt valuable, is this. In Scotland, particularly in the north of it, we are accuſtomed to make all our fabrics of a quality really and truly equal to what we vouch them to be; whereas the Engliſh, in their mutual competition for cheapneſs and for fineneſs, have fallen into the habit of deteriorating the intrinſic value of their ſtuffs. It is, perhaps, chiefly on account of this, that the woollen-cloth manufacturers of Galaſhiels, and the woollen-ſtocking manufacturers of Hawick, have become ſo flouriſhing amidſt ſeveral diſadvantages.'

Mr Lawrie is ſanguine as to the ultimate proſperity of woollen manufactures in the Highlands, not becauſe the whole of that country itſelf is favourable to that particular line of buſineſs, but from the circumſtance of Inverneſsſhire poſſeſſing advantages of a radical kind. This fact, in regard to that county, may be true, and therefore it may be inferred that this ſpecies of manufacture will thrive in that diſtrict; but that affords no probable reaſon for its univerſal proſperity over the whole face of the north of Scotland. I ſhrewdly ſuſpect that Mr Lawrie is a native of that country, and, like many other of his countrymen, thinks there is no other country in the world equal to the one in which they firſt drew breath. It may be true, that the induſtry requiſite in the domeſtic woollen manufactures in the Highlands is peculiarly adapted to the natives; but I can aſſure that gentleman, that the produce of this ſpecies of induſtry cannot poſſibly come into market upon as eaſy, or upon ſo cheap terms, as the manufactured goods of the clothing diſtricts of the north and weſt of England. That ſort of induſtry may knit the ſtockings that are deſtined to cover the naked legs of the natives, or even the plaid that is to ſhelter them from the blaſts of the ſtorm; but they never can be conducted upon a great ſcale. I preſume Mr Lawrie has not had the curioſity to examine the woollen and cotton manufactures in the South, or he muſt have been impreſſed with their prodigious ſuperiority in point of production, over the puny and iſolated exertions of the Highlanders in a ſimilar line. The independence that he alludes to, is totally incompatible with induſtry and application; for if a man

man be permitted to riſe from his ſeat juſt when he pleaſes, he will be found oftener with the rod or gun in his hand than he ought to be. It is quite ridiculous to talk of a Highlander being partial to the acquiſition of wealth by means of economy and parſimony; for that road to wealth is always compulſory, and can in no caſe be a matter of choice. Would the Highlander prefer ſixpence a day to a ſhilling, although, in his preference to the former, he would find a greater field for the accumulation of money by parſimony. If he be partial to this mode of acquiring wealth, it is becauſe he has never yet taſted of the high wages of the manufacturer in the South. I can eaſily believe that a Highland family may live much more frugally than any other, becauſe they have been accuſtomed to ſmall enjoyments. Still it does not neceſſarily follow from that ſingle circumſtance, that they can bring the produce of their induſtry to market upon lower terms than other people. If Mr Lawrie alludes merely to the labour of the hands, he may be right; but, in the combination of human with mechanical labour, it is totally out of the queſtion. The labour of the individual is, in a ſuppoſition of this kind, of ſo little importance in compariſon of the effect produced by machinery, that though the Highlander may eat leſs, his work is not ſo cheap as that of the other who ſwallows a good deal more than he does of ſolids and liquids. The Engliſh are ſaid, from a competition for cheapneſs and fineneſs, to have fallen into the habit of deteriorating their ſtuffs, but that the Scotch fabrics are equal to what they are repreſented to be. Hence he foretells the riſe of the one, and the fall of the other. But does not this gentleman perceive, that among a rude people, wearing apparel, like the wearers, is rude and coarſe;—and that as the people become refined, the fabric becomes finer and finer? It is becauſe the Engliſh are a more refined and luxurious people than the inhabitants of Inverneſſhire, that their woollen goods are thinner and finer. It is becauſe they will not wear coarſe goods, and not from any decay in the excellence of the manufacture, that their cloth is fine, and of a thin texture. He may believe me, that the preſent is the coarſeſt in the hiſtory of Inverneſſhire goods, and that they will learn to manufacture them thinner and cheaper every day. It is not upon this account that the Galaſhiel and Hawick manufactures have been ſo much upon the increaſe of late years. Every country requires, for home conſumption, a certain annual quantity of coarſe goods; and as that part of Scotland is a great ſheep diſtrict, the eſtabliſhment of them was very natural, and their ſucceſs moſt likely in that quarter. Had they been ſo unwiſe as to have attempted, at the outſet, the manufacture of fine cloths, which require a greater knowledge and capital than they were poſſeſſed of, they would in all probability

probability have failed of ſucceſs. By and by, however, the Galaſhiel and Hawick lads will follow the example of their more ſouthern neighbours, and manufacture a finer kind of goods than they do at preſent. The progreſs from rudeneſs to refinement in woollen manufactures, is as certain and unavoidable as in morals.

Let us now attend to the mode in which Mr Lawrie would apply the woollen manufactures to the improvement of the Highlands, and to the melioration of the actual circumſtances of the natives. 'My propoſal (ſays he) is, that each landlord ſhall begin with remedying the injury that he does to the Highlander, in expelling him from his farm, by granting to him, in perpetuity, a piece of ground ſufficient to raiſe all the vegetables that his family and a cow may require; not exceeding, however, an acre; and alſo a few acres of moor land, or ſome ſuch ground that is barely improveable, and not very diſtant, nor out of the way; upon condition of receiving from him the amount of its rental, by way of feuduty, or perpetual ground-annual; but perfectly free of every other burden whatever, except thoſe which the Government or community may afterwards lay upon it,' &c.

One would imagine, that, in applying the woollen manufactures to the improvement of the Highlands and its inhabitants, this application would refer, directly and immediately, to the manufactures themſelves. In this point of view, he might have recommended the bringing of manufacturers from Yorkſhire, and the introduction of the improved ſtate of the trade as carried on in that county, in ſo far as applicable to the preſent condition of the Highlands. Something of this kind would have been the obvious and immediate way of making this ſpecies of manufacture ſubſervient to the improvement of that part of the country. This, however, is no part of Mr Lawrie's plan. He expects to raiſe the Highlands to a high pitch of improvement, not by means of the woollen manufacture, with which he originally ſtarted, but merely by granting the inhabitants a feu of a ſmall bit of ground for the accommodation of their families. An appropriation of this kind may produce, no doubt, a ſufficiency of kail and potatoes for domeſtic uſe; which is all very well: But I cannot ſee how the woollen manufactures are to be at all improved by this accommodation of the individual. It might, on the contrary, be argued, that this mixture of employments in the ſame perſon, will prevent him from attaining to excellence in either; and that, in the preſent caſe, he will be neither a good farmer nor a good manufacturer. Upon looking at Yorkſhire and the weſt of England, the ſeats of the woollen manufactures, the mode recommended by this gentleman has not been adopted; and it would be prudent for the Highland manufacturer, in the infancy of his trade,

trade, ſtrictly to follow their example. By and by, perhaps, he may with ſafety deviate from the beaten paths.

'The improvement of a ſpot' (continues he) 'that was now abſolutely his own, would ſtimulate the induſtry of the Highlander and his family. They would be inceſſantly employed either upon the property itſelf, or in labouring, in order to obtain means for bringing this ſpot to its higheſt uſe. And as they would by their induſtry, and the aſſiſtance of friends, ſoon be able to rear a houſe on their own property, the landlord's rent would become ſecured without further trouble.' I make not the ſmalleſt doubt but the abſolute poſſeſſion of a piece of ground would ſtimulate the indolence even of a Highlander. But if he has no other means of improvement than what is afforded by his own induſtry and this barren waſte, I am afraid he would make very little progreſs. If the natives are to be wholly employed in the improvement of this perpetuity, they muſt be previouſly in poſſeſſion of ſome capital, upon which they may ſubſiſt until a certain degree of melioration has taken place. But we all know, that theſe poor people are totally deſtitute of this capital, and of courſe cannot begin this ſuppoſed ſeries of improvements. To labour for others, is not mending matters a whit; for the wages of that induſtry muſt neceſſarily be ſpent upon their ſubſiſtence as faſt as they get it. In theſe circumſtances, how can they be ſuppoſed capable of building a houſe upon the ground they have acquired in perpetuity out of their own means? Or how can their friends, in no better circumſtances, be of the ſmalleſt aſſiſtance to them, in this or in any other reſpect?

I agree perfectly with Mr Lawrie, that the woollen manufacture is the moſt likely branch of trade to thrive in the Highlands. But I differ with him moſt eſſentially as to the mode of introducing it into the country. I am decidedly averſe, at this early period, to the eſtabliſhment of large factories, ſuch as thoſe of Mr Fraſer; becauſe they have to contend with the immenſe capitals and ſuperior knowledge of our Southern neighbours. I feel a like repugnance, and for the ſame reaſon, to the manufacture of cloth for foreign uſe; and I am decidedly of opinion, that the natives ſhould, for ſome time at leaſt, attempt the extenſion and improvement of this kind of manufacture upon the ſmall ſcale that exiſts at preſent; and that the goods ſhould be for home conſumption only. This appears to be all that the means of the country are yet equal to; and if more be attempted, a thouſand to one but a failure will be the conſequence. By and by, however, when theſe ſmall eſtabliſhments have taken deeper root, and greater capital and knowledge have been accumulated, the finer and dearer goods may then be manufactured with every proſpect of ſucceſs.

There

There is a great deal of after diſcuſſion in this paper, upon ſubjects nowiſe connected with the means of preventing the depopulation of the Highlands. Upon topics not immediately allied to the principal ſtory, I am unwilling to occupy that room in your Magazine which can be ſo much better employed. I beg leave merely to ſay a few words upon a ſubject that has been often diſcuſſed, but which ſo very few are either willing or able to underſtand.

The recent emigration from the Highlands, is a ſtep in the political progreſs of mankind; a link in the great chain that connects together the two extremes of civilization and barbariſm. The revolution that had already taken place in the ſouth of Scotland, travelled northward, and paved the way for a ſimilar change in that extenſive part of the iſland lying on the other ſide of the Forth. This change in the political ſyſtem reſembles the paroxyſm of diſeaſe in the human body, when it is about to paſs into a ſtate of good health. The conſequences that muſt neceſſarily follow, cannot fail to prove injurious to ſome part of the inhabitants; but, that it muſt in the end be ſalutary to the nation, upon the whole, cannot be doubted. It is ridiculous to blame the Highland proprietors, for falling in with this alteration of circumſtances in the ſtate of ſociety; for had they reſiſted its further progreſs, they muſt have ſtarved. I muſt, however, blame them exceedingly for not anticipating the changes which ſuch a revolution would neceſſarily occaſion in the condition of their vaſſals; for in that caſe it would have been more gradual, and of courſe attended with fewer of thoſe violent effects with which it has been unfortunately accompanied. But it ſeems to be the lot of all who have the means in their power, of ſmoothing the tranſition of one ſtate of things into another; never to ſee the neceſſity of the alteration, until it be too late to take meaſures for leſſening the evil conſequences which more or leſs attend every exertion of the human mind towards a ſtate of perfection. Had the Highland proprietors foreſeen the emigration of their dependants that muſt neceſſarily reſult from agricultural improvement, the change in the ſtate of ſociety would have been gradual, and on that account they would have had leiſure to prepare the minds and habits of the people. I would not exactly ſay that no emigration at all would have taken place; but am confident that it would not have been nearly ſo extenſive or melancholy in its effects. Theſe gentlemen, however, being unaccuſtomed to the contemplation of the natural hiſtory of mankind, did not perceive the great revolution that was faſt approaching, until it burſt like thunder over their heads. They were compelled, of courſe, to go along with the ſtream, and to be the cauſe of a conſiderable emigration of their fellow-

fellow-countrymen to the continent of North America. In the midſt of the unpleaſant reflections that muſt riſe in their minds upon ſuch a retroſpect, they will have the ſatisfaction of thinking, that theſe poor people are laying the foundation of happineſs and independence to future generations; and that they contribute, by their removal, to a great change for the better in the agricultural ſtate of the country.

As long as mankind or their rulers will perſiſt in ſhutting their eyes againſt the revolutions which neceſſarily take place in the progreſs of ſociety, thoſe changes cannot be accompliſhed without ſome attendant circumſtances of regret. A great good can ſeldom be performed without a partial evil: the whole cannot be benefited but at the expenſe of a part. Although, however, we muſt for ever lament the fate of thoſe who ſuffer by a change of this kind, we ought not to forget, that a much greater number will be eſſentially benefited. Does not a partial amputation from the human frame take place every day, for the ſake of the preſervation of vitality, not only without blame, but with approbation? For the ſame reaſon, a partial emigration from the Highlands is contemplated with ſatisfaction, as the only means of improving that part of the empire. It would not be more ridiculous for the operator to delay the amputation of a limb, to the certain death of the patient, merely from the fear of giving pain, than it would be in a legiſlator to put a ſtop to emigration from the Highlands, to the certain prevention of all improvement in the North, ſimply on account of its being injurious to a few.

But, really, I am not aware of the great inhumanity of this involuntary emigration, in a comprehenſive point of view. I am ſenſible enough of the unpleaſant ſenſations which perſons muſt experience when leaving their native land, poor and wretched as it may be, for ever, without a proſpect of return. But there are circumſtances in the particular condition of the Highlanders, that muſt take their caſe a good deal out of the general rule, and greatly diminiſh the pain they would otherwiſe feel at abandoning the country which gave them birth. God knows, that the condition of the greater part of theſe people in their own country was but miſerable enough; and that, independently of the *amor patriæ* which is ſuppoſed to burn ſo ſtrongly in their boſoms, they had nothing to regret in the change of the place of their abode. Under a ſky cold and humid, with a ſoil rugged and barren in the extreme, and incapable, from their prejudices and habits, ever to riſe in their native country above the level of a day-labourer, there is nothing conſolatory in the future proſpects of theſe poor people, and of the generations that are to

follow. By one great effort, by one leap across the Atlantic, they escape from a prison in which all their moral and physical qualities lye immured. There is a difficulty, I know, in forgetting that spot where we first drew breath; but, with the generation who makes the sacrifice, all painful remembrances are buried in one common grave. I am, yours, &c.

Glasgow. A CONSTANT READER.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR, *Farming Society of Ireland, No. 60, Summer Hill.*

BY directions of the Committee of this Society, I transmit you the Adjudications and Report of our last Spring Show of Fat Cattle, &c. in order that the same may be inserted in your next Number of the Farmer's Magazine. I also send the Report of the Show of Broad Cloth.

The death of our secretary, John Hamilton, Esq. has prevented the sending of these papers at an earlier period. I am, &c.

WM. DIX, *Act. Secr.*

[Impressed with a full sense of the attention shown us by the Farming Society of Ireland, in thus transmitting an account of their proceedings at the Spring Show, we have inserted copious extracts; it being out of our power to present the account in its original state.]

FARMING SOCIETY OF IRELAND.

'Having frequently given our tribute of applause to this enlightened and patriotic Society, for their exertions in improving the agriculture and live stock of Ireland, we have now to say, that the success of those exertions was never more apparent than at the late *Spring Show*, when the improvement in each species of live stock was strikingly evidenced to the most inexperienced spectator. Some idea may be formed of the interest which the public take in these exhibitions, from the circumstance of 3188 persons having paid for admission to the Show.

'The Society had to lament the loss of their late excellent Secretary, Mr HAMILTON, who had died only two days before the Show. The business, however, was conducted with the greatest regularity and judgment by the gentleman who executed the duties of that office during Mr Hamilton's indisposition. All the stock were entered on Monday the 6th, and certificates given in of their ages, and the mode and time of feeding. Very early on Tuesday morning, they were placed in their respective classes, the NEAT CATTLE having all been previously weighed alive on a machine

machine erected for that purpose. There were, in all, *twenty-nine* fat oxen, cows and heifers, most of them admirable specimens of their respective breeds, the produce of the cattle which were imported into Ireland in consequence of the premiums offered by this Society in the first years of its institution, few of which could have been brought forward in a fat state sooner. *Long Horns, Herefords, North Devons, Teeswater* or *Durham*, and *Holderness* cattle, contended for superiority.

'There were not so many competitors for the premiums offered for SHEEP as might have been expected: only five pens of *New Leicester*, and two of *Southdown* wethers were shown. We have always approved of a *moderate mixture* of the *New Leicester* blood with the coarse, unthrifty, neglected sheep which formerly occupied the rich pastures of this country; but cannot, however, conceal our decided objection to the *over-fat mutton* which is frequently exposed to sale in our markets, and which we think both wasteful and disgusting. The destruction of *Merino* sheep by the ravages of the present war in Spain, and the extravagant price of clothing-wool in consequence thereof, should make the *fleece* a principal object of attention. The Society have been engaged, for two or three years, in improving the mountain sheep of the county of Wicklow, by supplying the breeders with *Southdown* rams; and so great have been the advantages of even a single cross, that rams of that breed are now sought with the greatest avidity; and there is reason to believe, that there will not, in two years more, be a single *native* ram in that county. Lord MEATH exhibited a pen of hoggets, got upon native Wicklow ewes by one of the Southdown tups presented to the Society by the DUKE of BEDFORD, which evinced, in the strongest manner, the utility of such a cross. Mr SYMES also produced a native *Wicklow* wether, which had been fed exactly in the same manner as his pen of Southdowns. The great inferiority of this sheep to Lord MEATH's hoggets, was obvious to every one who examined them. So far the Society have done well; but it is hoped they will not stop there. They are called upon to establish the *Merino* breed of sheep in this country, and never to cease, till they combine in the same animal the most valuable fleece, the best formed carcass, and the highest flavoured mutton. In Spain, the Merino sheep is merely a vehicle for wool; but, in Ireland, it is hoped, by the experience, skill and ingenuity of the members of the Farming Society, aided by a temperate climate and a dry calcareous soil, producing the sweetest herbage throughout the greatest part of the year, the Merino breed will be brought to a degree of perfection unknown in any other country.

'The SWINE were superior to those which have been exhibit-

ed at any of the Society's former Shows. The improvement in this most useful species of animal, has been more rapid and general than in that of any other. The imported breed arrive at great weight in *two* years; whereas the old flat-sided pigs of this country could not formerly be fatted in less than *four*. The merchants in the provision trade invariably give a higher price per cwt. for the former than for the common Irish pig.

'On Friday the 10th, the PLOUGHING-MATCH took place at Collinstown, the seat of M. MILLS, Esq. Such a scene as this was truly interesting to every Irishman. Twelve ploughs started; and Mr Grierson was again declared the successful candidate. Having won the Society's *Gold Medal* for the best ploughing in the year 1803, and the *Cup* at four successive ploughing-matches, the Society presented *it* to him, "as a testimony of their high respect for his unremitted and successful exertions in agriculture." A *New Cup* is to be ploughed for next year, which, in like manner, will become the property of any person who obtains it *three times successively*.

'The company who attended the ploughing-match were most elegantly entertained with a cold collation by Mr MILLS.

'His Grace the DUKE of RICHMOND, patron of the Society, honoured the Show in Dublin and the Ploughing-match with his presence, and was pleased to express his unqualified approbation of both. The Society retired to dinner at Morrison's, in Dawson-Street, where Mr Grierson received their most cordial congratulations; and, in return, sung them his "*Reasons for ploughing*," an elegant parody (composed by himself) of Morris's "Reasons for drinking."

Adjudication of Premiums.

MONDAY, 6. FEBRUARY, 1809.

SEED CORN.

For the beſt barrel (sixteen ſtones) of imported *BARLEY, being a fair ſample of a parcel of at leaſt fifty barrels* - £. 10

Mr Edward Hay, *ſeedsman*, imported from Norfolk, weight per Wincheſter buſhel ſtraiked - - - - - *lb.* 50 *oz.* 7

Premium withheld, the parcel being deficient in quantity.

For the beſt barrel of BARLEY, grown in Ireland, being a fair ſample of a parcel of at leaſt ten barrels - - - - £. 10

Hartley Hudſon, Eſq. do. do. 53 12

Premium withheld, being deficient in merit for ſeed.

For the beſt barrel (fourteen ſtones) of imported *OATS, being a fair ſample of a parcel of at leaſt fifty barrels* - - - £. 10

Mr Edward Hay, *ſeedsman*, imported from Northumberland, *lb.* *oz.*

per do. do. - - 43 10

Premium withheld, the parcel being deficient in quantity.

For the beſt barrel of OATS, grown in Ireland, being a fair ſample of a parcel of at leaſt ten barrels £. 10

Mr Jo. Gibbon, *farmer*, weight per Wincheſter buſhel - 45 1

Wm. Deey, Eſq. do. do. - 42 10

Geo. Grierſon, Eſq. do. do. 42 13½

Premium adjudged to Mr Jo. Gibbon.

TUESDAY,

TUESDAY, 7. MARCH, 1809.

NEAT CATTLE.

OXEN.

Class

1. *For the beſt fat OX, three years old* £.10
   Thos. Going, Eſq. *(long-horned.)*
   Premium adjudged to Thomas Going, Eſq.
   For the next ditto - - £. 5
   No claimant.
2. *For the beſt fat OX, four years old* £.10
   For the next ditto - - £. 5
   1. T. Going, Eſq. *(long-horned)*
   2. Jas. Critchly, Eſq. *(ditto)*
   3. H. S. Lloyd, Eſq. *(ditto)*
   First Premium adjudged to Thomas Going, Eſq.
   Second Premium adjudged to Jas. Critchly, Eſq.
3. *For the beſt fat OX, five years old,* £.10
   For the next ditto - - £. 5
   1. Arthur Reynell, Eſq. a Minor, *(Hereford)*
   2. Colonel La Touche, *(Holderneſs)*
   3. Thomas Going, Eſq. *(long-horned)*
   4. John Fetherſton, Eſq. *(ditto)*
   5. Henry Lloyd, Eſq. *(ditto)*
   First Premium adjudged to Arthur Reynell, Eſq.
   Second Premium adjudged to Colonel La Touche.
4. *For the beſt fat OX, ſix years old, or upwards* - - - - £.10
   For the next ditto - - £. 5
   1. James Critchly, Eſq. *(long-horned)*
   2. Sir Thomas G. Newcomen, Bart. *(Teerwater)*
   3. Colonel King, *(long-horned)*
   4. William Morris, Eſq. *(ditto)*
   5. Lord Lorton, *(ditto)*
   6. Sir John Browne, *(ditto)*
   First Premium adjudged to James Critchly, Eſq.
   Second Premium adjudged to Sir T. G. Newcomen, Bart.
5. *For the beſt of the Prize OXEN*—the SILVER MEDAL.

	Claſs
1. Arthur Reynell, Eſq.	3.
2. James Critchly, Eſq.	4.
3. Sir T. G. Newcomen, Bart.	4.
4. Thomas Going, Eſq.	2.
5. Thomas Going, Eſq.	1
6. Colonel La Touche	3.
7. James Critchly, Eſq.	2.

The MEDAL adjudged to Arthur Reynell, Eſq.

COWS or HEIFERS.

Class

6. *For the beſt fat COW or HEIFER, three years old* - - - £.10
   James Watſon.
   Premium withheld.
   For the next ditto - - £. 5
   No claimant.
7. *For the beſt fat COW or HEIFER, four years old* - - - £.10
   For the next ditto - - £. 5
   1. Morley Saunders, Eſq. *(long-horned)*
   2. John Fetherſton, Eſq. *(ditto)*
   First Premium adjudged to M. Saunders, Eſq.
   Second Premium adjudged to John Fetherſton, Eſq.
8. *For the beſt fat COW or HEIFER, five years old* - - - £.10
   For the next ditto - - £. 5
   1. John Fetherſton, Eſq. *(long-horned)*
   2. John Gerrard, Eſq. *(ditto)*
   3. Arth. Reynell, Eſq. *(long-horned)*
   4. Morley Saunders, Eſq.
   First Premium adjudged to John Fetherſton, Eſq.
   Second Premium adjudged to John Gerrard, Eſq.
9. *For the beſt fat COW or HEIFER, ſix years old, or upwards* - £.10
   For the next ditto - - £. 5
   1. Arth. Reynell, Eſq. *(Hereford)*
   2. J. Fetherſton, Eſq. *(long-horned)*
   3. C. P. Doyne, Eſq. *(ditto)*
   4. Sir T. G. Mewcomen, Bart. *(Teerwater)*
   5. Earl of Farnham, *(Devon)*
   6. J. Gerrard, Eſq. *(long horned)*
   7. G. L. Nugent, Eſq. *(ditto)*
   First Premium adjudged to Arth. Reynell, Eſq.
   Second Premium adjudged to John Fetherſton, Eſq.
10. *For the beſt of the Prize COWS or HEIFERS*—the SILVER MEDAL.

	Claſs
1. Arth. Reynell, Eſq.	9.
2. John Fetherſton, Eſq.	9.
3. John Fetherſton, Eſq.	8.
4. John Gerrard, Eſq.	8.
5. Morley Saunders, Eſq.	7.
6. John Fetherſton, Eſq.	7.

The MEDAL adjudged to Arth. Reynell, Eſq.

SHEEP.

COMBING-WOOLED.

Class

11. *For the beſt pen of five fat* one ſhear *WETHERS* - - £.10
For the next ditto - - £. 5
1. T. Going, Eſq. (*New Leiceſter*)
2. W. Fiſhborne, Eſq. (*ditto*)
3. J. P. Garnett, Eſq. (*ditto*)
4. B. Morris, Eſq. (*ditto*)
Firſt Premium adjudged to Thos. Going, Eſq.
Second Premium adjudged to W. Fiſhborne, Eſq.

12. *For the beſt pen of five fat* two ſhear *WETHERS* - - £.10
T. Going, Eſq (*New Leiceſter*)
Premium adjudged to Thomas Going, Eſq.
For the next ditto - - £. 5
No claimant.

CLOTHING-WOOLED.

13. *For the beſt pen of five fat* two ſhear *WETHERS* - £.10
Owen Wynne, Eſq. (*South Down*)
Premium adjudged to Owen Wynne, Eſq.
For the next ditto - - £. 5
No claimant.

14. *For the beſt pen of five fat* three ſhear *WETHERS* - - £.10
Reverend James Symes (*South Down*)
Premium adjudged to the Rev. James Symes.
For the next ditto - - £. 5
No claimant.

15. *For the beſt WETHER, of any age or breed, whether ſelected from the pens, or exhibited alone*—The SILVER MEDAL and £. 5.
The Medal and £. 5 adjudged to Thomas Going, Eſq.

SWINE.

16. *For the beſt fat PIG, exceeding ſix months, but not exceeding one year old* £. 5
For the next ditto - - £. 3
No claimant.

17. *For the beſt fat PIG, not exceeding two years years old* - - £. 5
For the next ditto - - £. 3
1. James Pim, Eſq.
2. Thomas Going, Eſq.
3. Mrs Cameron.
4. Mrs Urbani.

Class

First Premium adjudged to Jas. Pim, Eſq.
Second Premium adjudged to Thomas Going, Eſq.

18. *For the beſt fat PIG, not exceeding three years old* - - - £. 5
For the next ditto - - £. 3
1. Brabazon Morris, Eſq.
2. James Pim, Eſq.
First Premium adjudged to Brabazon Morris, Eſq.
Second Premium adjudged to James Pim, Eſq.

19. *For the beſt of the prize SWINE*—The SILVER MEDAL.
1. James Pim, Eſq. Claſs 17.
2. Thomas Going, Eſq. 17.
3. Brabazon Morris, Eſq. 18.
4. James Pim, Eſq. 18.
Medal adjudged to Jas. Pim, Eſq.

PLOUGHING-MATCH,

Held at COLLINSTOWN, near Dublin,

FRIDAY, 10. MARCH, 1809.

To the perſon who ſhall plough at leaſt five inches deep in the beſt manner—The CUP and £. 15.

To the next ditto - - - £. 5

Candidates.		*Ploughmen.*
J. Garnett, Eſq.	*Horſes.*	J. Trahy.
Sir R. Levinge.	*Bullocks.*	R. Reddy.
Lady Ponſonby.	*Horſes.*	M. Nowlan.
C. Clinch, Eſq.	*Ditto.*	J. Flanagan.
R. Verſchoyle, Eſq.	*Bullocks.*	O. Bardin.
Rev. Jas. Symes	*Ditto.*	J. Doyle.
T. Adamſon, Eſq.	*Horſes.*	J. Claffy.
J. Grange, Eſq.	*Ditto.*	L. M'Coy.
J. Garnett, Eſq.	*Heifers.*	P. Field.
G. Grierſon, Eſq.	*Horſes.*	W. Kippie.
Arth. Reynell, Eſq.	*Bullocks.*	J. Mooney.
Mich. Mills, Eſq.	*Horſes.*	Jas. Bell.

The Cup and £. 15 adjudged to George Grierſon, Eſq.
The Second Premium adjudged to Michael Mills, Eſq.

To the beſt PLOUGHMAN - £.10
To the next beſt - - - £. 5
Firſt Premium adjudged to W. Kippie, Mr Grierſon's ploughman.
Second Premium adjudged to Jas. Bell, Mr Mills's ploughman.

To the beſt PLOUGHMAN, a native of Ireland - - - - £. 5
Premium adjudged to Patrick Field, Mr Garnett's ploughman.

To the owner of the beſt pair of plough HORSES - - - £.10
Premium adjudged to George Grierſon, Eſq.

To the owner of the beſt pair of plough OXEN *or* HEIFERS - - £.10
Premium adjudged to Arthur Reynell, Eſq.

BROAD CLOTH.

The progreſſive improvement which has taken place in this article, muſt give pleaſure to every friend of Ireland; all the pieces that were exhibited having been very much ſuperior to thoſe produced laſt year. It is worthy of remark, that the firſt and ſecond cloths which obtained the premiums, have been manufactured entirely of South Down wool; and are equal in value to Engliſh ſuperfine, now ſelling at 45s. and 50s. per yard, and which the ſeller is enabled to afford to the public at 28s. and 30s. per yard. How much this excellent breed of ſheep merits encouragement in this country, both for the value of the fleece and carcaſs, will appear from the weights of the prize ſheep of that breed exhibited at the laſt ſhow.

	lib.	*oz.*
Mr Wynne's South Down two ſhear wether weighed alive	119	0
Fleece - - - -	4	14
lib. oz.		
Blood - - - 4 3		
Head and Pluck 6 13		
Entrails - - 10 3		
Fat - - - - 11 8		
Pelt and Feet - 9 3		
Carcaſs - - - 75 12		
117 5		
Mr Symes's three ſhear wether weighed alive - - -	166	0
Fleece - - - - -	4	14
lib. oz.		
Blood - - - 6 2		
Head and Pluck 9 0		
Entrails - - 12 10		
Fat - - - - 19 6		
Pelt and Feet - 9 14		
Carcaſs - - 108 12		
165 12		

The fleeces of theſe ſheep ſold from 3s. 10d. to 5s. 4d. per pound.

The Premiums for Broad Cloth and the adjudications were as follow.

For the fineſt and beſt end of broad cloth, not leſs than 20 *yards, made entirely of wool the growth of Ireland* - - £. 20
For the ſecond beſt - - - £.10
For the third - - - £. 5

1. Meſſrs Nicholas and John Hunt, (blue), of wool grown by the Marquis of Sligo and the Rev. James Symes.
2. Meſſrs Walter Burke & Sons, (ſcarlet), of wool grown by Owen Wynne and George Grierſon, Eſqs.
3. Mr Joſeph Ormsby, (corbeau), of wool grown by the Earl of Farnham and Sir Will. Homan, Bart.
4. William Parnell, Eſq. (blue), of wool grown by himſelf.
5. Mr Jeremiah Dwyer, (brown), of wool grown by Lord Aſhtown and Francis Trench, Eſq.

First Premium adjudged to Meſſ. Hunt.
Second Premium adjudged to Meſſrs W. Burke & Sons.
Third Premium adjudged to Mr James Ormsby.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Difficulties which attend the Improvement of Moss Land.

SIR, *East Lothian, Feb.* 8, 1809.

PERMIT me, through the channel of your uſeful Magazine, to congratulate the public on having reached this happy era of agricultural improvement. There has not, perhaps, at any one period in the annals of that art, been ſuch rapid, ſuch accelerated progreſs in improvement, as within theſe laſt ten years!

The aſtoniſhing riſe of the prices of agricultural produce; their unexpected ſteadineſs through that period, with the proſpect of new improvements ſtill opening to view; the ſingular patronage and protection of enlightened ſocieties and patriotic individuals;—all combine to render the art of agriculture reſpectable, and to attract the capital ſtock of the country, in a conſiderable degree, to promote its beſt and trueſt intereſts.

In this view of the matter, is it any wonder that reſpectable, learned men, have devoted their time and talents to reſearches which have an evident tendency to give freſh energy to practical farming? Yet after all their exertions; after all the abilities employed in agricultural purſuits, how much are we in the dark concerning *many important branches* on which their writings have only, as it were, caſt a few rays of light! But as rational theory will gradually lead to real improvement, I am ſatisfied it ought to meet with the moſt hearty encouragement from every patriot—from every friend to agriculture.

The ſubject of peat moſs has, for ſome time paſt, occupied my attention. According to ſome preſcriptions, I have been for two years paſt preparing moſs as a manure, by a proceſs which is ſaid to be capable of removing its ſterility. The reſults are not yet worth noticing, though appearances are favourable. I am puzzled, however, with contradictory ideas of its nature, properties, and effects, which, if they can be explained and rendered conſiſtent, would likely lead to the proper means of converting that dormant, inert ſubſtance, into an active manure.

I am well pleaſed with the attempts hitherto made to obviate difficulties in the way of improving moſs for various purpoſes; and thoſe who take the trouble of ſuch inveſtigations, deſerve the applauſe of every practical as well as ſpeculative farmer. Improvements muſt have a beginning, and they muſt advance by degrees;—one ſtep is preparatory to another. But I have looked into ſeveral authors who have treated of moſs; and after all they have written, I think there is ſtill much room to doubt, and much reaſon for ſcepticiſm as to their different theories. As a plain man, I beg leave to ſtate, through the medium of your uſeful Magazine, a few queries concerning that variety of ſoil, which I hope ſome of thoſe learned gentlemen may be able to ſolve.

1. It ſeems agreed that all peat moſs conſiſts of vegetable matter. According to Dr Rennie's theory, it is compoſed of ligneous and aquatic plants; but I have ſeen a heap of leaves of trees, &c. and of aquatic plants, lying together till they were actually rotten, and yet no moſs was formed. What is the reaſon of this? Why do theſe materials form moſs in certain circumſtances, and not in others? I have hitherto looked in vain for a ſatisfactory account of this ſubject.

2. I ſee

2. I obſerve ſome authors mention that the air of moſſes is healthful; whereas it is well known that fevers and agues abound in low lying carse grounds and fens. How can this be accounted for? and what is the difference of the air of a moss and any other level?

3. When a heap of vegetables are huddled together till they are diſſolved into earth, that earth is always loose, friable, and porous; whereas a piece of peat moss, though formed of the ſame materials, is a tough ſubstance, and ſeems to be impervious to water. How can this be accounted for? What is the cauſe why a peat, when newly dug, does not crumble down into earth? Why does it become a hard, tenacious, and inſoluble ſubstance?

4. When a heap of vegetables are *reduced to earth*, though the plants of which it is compoſed were inflammable (ſuch as fir-wood), yet they loſe their inflammability; whereas peat moss, though it has been immerſed for many years in *water too*, retains all the inflammability it originally poſſeſſed. How can this be accounted for, on any of the theories that have yet been given us? What is the preciſe cauſe why wood and other vegetables do not loſe their inflammability *entirely* in ſuch circumſtances?

5. It is ſaid that moss does not exiſt in warm climates. What is the cauſe of this? Do not ſuch climates contain ſimilar vegetables? nay, may not ſimilar vegetables be traced in their marſhes? Why then is no moss formed, if that ſubstance be of vegetable origin, as has been ſtated, and, I think, ſatisfactorily proved by Dr Rennie?

6. It is even ſuggeſted in the Eſſays he has already publiſhed, that moss is renovated when dug: if ſo, this may be of importance. But what are the means to be uſed to promote this proceſs? or, on the contrary, how may it be effectually checked? If this could be aſcertained, it might be of vaſt conſequence to the public; for we might then have it in our power to check or promote the proceſs of *peatification* at pleaſure.

7. It is aſſerted that moss preſerves vegetable and even animal ſubſtances from putrefaction. If this be the caſe, it muſt differ from vegetable mould, though formed of ſimilar materials. But wherein does this difference conſiſt? And what are the preciſe cauſes of this antiſeptic quality?

8. In ſome low grounds I have ſeen moss which was quite rotten. It was loose and friable, like mould. I could not form it into peat at all; for it crumbled down in the air as ſoon as dug, and was not inflammable. I have even obſerved this ſtratum of rotten moss, ſurrounded by that which made excellent peat. How can this be accounted for? To what uſe may this rotten moss be turned? Wherein does it differ from *peat* moss; and what are the cauſes of this difference?

9. In

9. In digging some moss in my possession, I never could discover a single worm, or other reptile, excepting merely on the surface; whereas on all other soils, I have uniformly seen a multitude of insects and reptiles. What is the cause of this difference?

10. Of all soils, I find moss the most sterile at first. Till it be completely pulverized by frequent digging and manuring, I could never raise any kind of crop upon it. Now, if it consists entirely of vegetable matter, how can this be accounted for? What are the causes of this sterility, and what is the best remedy? Indeed, for my part, till the cause is ascertained, I despair of finding the remedy.

These, Sir, are a few, and *only a few* of my doubts and difficulties on the subject of moss. If you, or any of your numerous correspondents can solve them, I shall be happy. At all events, I would recommend them to your attention, as highly deserving the notice of those who write on the subject. I am, &c.

QUÆSITOR.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Observations on the Draught of a Lease, inserted in No. XXXIV.

(Continued from Vol. IX. page 471.)

SIR,

THE draught of the lease submitted to the consideration of your readers, having neither beginning, nor end, nor length of years, I shall take it for granted, that these were not omitted in the principal lease, and suppose the entry to have been at *Candlemas* 1805, as to the arable lands, and at *Whitsunday* thereafter as to the houses and grass grounds; and that the lease is to terminate, as to the *whole*, at Martinmas 1819; and that the terms of payment were at Candlemas and Lammas 1806, for the first year's rent. In the last year of the lease, the tenant is taken bound to pay, not only *two* half-years' rents, at the same term of Lammas 1819, but fifteen full years' rents will be exacted from him, although he will not have had more than fourteen years and a half's possession as to the houses and grass, and only fourteen years and three quarters' use of the arable lands. But as these allude to the particular case for which I supposed the lease to be framed, and do not appear in the copy under review, I shall forbear censure, and proceed to the mode of rotation proposed.

In the first views of agriculture, when theoretically contemplating the best management of land, we are apt to consider farming as a mere mechanical operation, and to suppose it possible to lay down one system suitable for a whole estate, a county, or a kingdom;

dom; but a little experience, the best of all schools, will teach us, that different soils generally met with in every farm, render it impracticable to frame common rules suitable for any extensive tract of ground; and although I feel firmly attached to a regular system in the culture of land, I am satisfied, that the restrictions proposed in the lease animadverted upon, will, without affording advantage to the proprietor, prove injurious to the tenant. I am ready to admit, that if we were to take it for granted, that the farms have been so laid out as to contain proper quantities of good soils, and that the tenant enters, upon this short lease, to ground already prepared for the rotation of crops proposed, that the tenant might consider the permission to have one half of the arable land in white crop, to the same purpose as if he had been allowed to exercise his best skill in it; but, in the present condition of the greater part of the land of estates in this kingdom, on which leases have lately commenced, it is not so much the inability of the farmer, as the excessive value paid for it, that has retarded improvement. At the commencement of a new lease, like a child who requires nursing in his infancy, land requires, for the first five or six years, a mode of management very different from that regular system which may be adopted afterwards. The estate for which the lease was drawn in its then condition, and the most of the tenants who entered to it, were alike incapable of the rules laid down; and now, at the commencement of the fourth year, they are much about where they began; whereas, had a progressive plan of improvement been enacted, matters might have been mended gradually.

Your Perthshire correspondent, Vol. IX. p. 440, has taken the start of me in one observation; and with him I agree, that though there can be nothing more absurd, yet there is nothing more common, than to find the same form of lease applied to the blowing sand, the out-field, the loamy clay, or richest infield ground,—the same to the farm of fifteen or twenty acres, as to the farm of a thousand acres; ridiculously reserving liberty to cut and carry off the trees from places where none are growing, —and right to the *fish*, though there is not so much as a spring of water on the farm. From the fees charged to the proprietor and tenant, the medium profit for drawing a lease, I am told, is about six or seven guineas. Now, for a less fee, a counsel will draw an elaborate paper applicable to the case for which the fee is paid. And what reason can be assigned for not expecting, for a fair fee, a lease containing a proper specification of the lands, &c.? Where the soil will admit of the rotation of crops recommended in this lease, the restrictions as to the last four years, on the part of the proprietor, appear to circumscribe the tenant's operations

rations so far, that in place of a half, he will not have it in his power to have a fourth part of the arable lands in white crop, in the two last years of his lease. It might have been expected, that a proper rotation having once been established upon the farm, there could be no cause to arrest the hand of industry, and suspend the system of a well-established rotation in the last four years of the lease. I admit that, in the continuation of such a rotation, the liberty of disposing of the last crop would remove from the incoming tenant the natural means of manure; therefore, as I would support the principle of those who are disposed to draw an impartial and advantageous line between master and tenant, I cannot approve of the liberty granted; nor can I figure a case where the master should consent to the white crop being removed from the farm, excepting, probably, in the near neighbourhood of a town where manure can be purchased. The only difficulty with me is, to fix the proper term at which the tenant should remove, and leave the crop at a fair valuation. It is a maxim which the wise have inculcated, that the proper season to dispose of an article, is when it is at its best; and as a corresponding principle, there is always the least risk when the article purchased is in its prime. Impressed with these ideas, I would recommend a trial of the old Lammas term, or rather about the 26th of August: at that season of the year, the crop could be valued by calculating the quantum per acre, (the price to be fixed by the valuators at Candlemas following); at that season, the stock and every thing on the farm would find a ready market. An entry at this season, too, gives the tenant the charge of reaping the crop he has to pay for,—and from that crop, an opportunity to form an opinion of the state of the land, and to lay down plans for the next one.

After laying down such a minute mode of management, the general obligation upon the tenant, 'to manage in a husbandman-like manner for the mutual advantage of all parties,' is a very puzzling one, and may admit of different constructions. I hope mine is not an illiberal one, when I understand by this clause, that the framer of it had in view such a season as the last, which may occasion some deviation in the next year's rotation; and that, by this general clause, the tenant will be warranted, in particular circumstances, to depart from the special rules, without subjecting himself in payment of either penal or pactional sums of money to the proprietor.

The clause obliging the tenant to pay the premium for insurance upon the houses, the property of the proprietor, and for which he has already been taken bound to pay at the rate of six *per cent.*, bears out the impression, that the framer of this lease has not been so sufficiently informed, as to be capable of avoiding the old custom

of

of impoſing unfavourable caſualties upon the tenant; for what is the difference of making a tenant pay ſuch a premium over and above his rent, and the old cuſtom, now abandoned, of making him furniſh hens, chickens, &c. or, in the option of the proprietor, to pay ſo much for them? Inſurance, in general, is certainly much to be recommended; and the proprietor who recommends it to his tenantry, ſhould not confine his recommendation to the narrow view of his own ſecurity only; in that view, the tenant is led to conſider it as an impoſition; whereas, if it was recommended upon the broad ſcale to cover the tenant's whole ſtock and crop, and the proprietor to allow from the rent the premium of the inſurance upon that amount, it would afford him the ſatisfaction of ſeeing the recommendation heartily embraced.

It is not ſo much the amount, as the nature of the exaction, which makes it be held as unreaſonable; and, certainly, to that cauſe only can be attributed the failure of the recommendation as to inſurance, on the eſtate in which it was introduced; a ſingle policy not having been applied for by any of the tenants.

To ſubject the tenant to the inconveniency of expoſing himſelf to the reſentment of ſportsmen of any deſcription, and to have his name uſed as their proſecutor, further than his own intereſt may require it, is a delegated power that ſhould have been reſerved to the proprietor or his gamekeeper. Under the exiſting game laws, it is impolitic for any gentleman to form his tenantry into a band for executing the game laws, or to degrade them with the ſervile office of aſſiſtants not only to his gamekeeper, but to his gamekeeper's *ſubſtitutes*.

From the local ſituation of a tenant, I would, however, have him encouraged to protect the property, and guard the intereſt of the proprietor in every pendicle connected with the ground. And, to encourage him ſufficiently as to trees, I have ſometimes thought, if proprietors were to contract with tenants for planting particular corners in the farm, under the eye of a ſkilful overſeer, and to allow them a certain proportion of the eſtimated value of the improvement at their removal, that the tenant, like a true huſbandman, would look forward to this return for his labour and attention; in which caſe, we might reaſonably expect a competition in the raiſing and preſerving of wood, equal to the preſent laudable exertion in the cultivators of ground for the beſt crops; the conſequence of which would be, that every farm, like a gentleman's domain, would ſoon have belts and clumps of plantings, both uſeful and ornamental. Hence, the complaint againſt large tracts of land under one owner, would in ſome meaſure be removed; for every tenant, like a little laird, would have, over and above his concern in the ground for crop, an intereſt in the ſpots upon his farm adapted for growing timber.

In

In offering theſe obſervations upon the leaſe under review, I have been actuated by no other motive than to provoke diſcuſſion for the good both of maſter and tenant; and ſhould I be ſo fortunate as to bring into the field thoſe of longer experience and greater abilities, I will feel ſufficiently repaid for any trouble taken; eſpecially as I may thereby have an opportunity of correcting my own ideas, from the better precepts of others.

I am, &c.

Dumfries, 9th February, 1809. X. S.

NOTE.

The Conductor intended, in this Number, to have offered some remarks upon the lease animadverted upon by X. S.; but is obliged to withhold them till another occasion, in order to make room for the following form of a lease, which seems to have met with the approbation of the Edinburgh Agricultural Society. This form is undoubtedly less objectionable than the one drawn up for an estate in the South of Scotland; though the Conductor must lament that the Edinburgh Society should be so much in error as to consider fifteen years to be the proper time for the endurance of a lease of an arable farm. The clause allowing *assignment* or *subsetting*, merits approbation. Were this clause to be a customary one, the agriculture of the country would be immensely benefited. N.

FOR THE FARMER'S MAGAZINE.

FORM of a Lease of an Arable Farm in Scotland, drawn up by Andrew Steele, Writer to the Signet, after discussing the Subject in the Edinburgh Agricultural Society, 27th March, 1809.

It is contracted and agreed between A., heritable proprietor of the lands after mentioned, on the one part, and B., presently farmer in ———, and C. as cautioner and surety for him, to the effect after specified, on the other part; That is to say, the said A. has let, and in consideration of the rent and other prestations after mentioned, in tack and assedation lets to the said B. and his heirs, whether of line, or by will and settlement, but always without division, and also to the assignees and subtenants of the said B., under the conditions and restrictions after mentioned,* *viz.* 1*mo*, The said tenant

* Without allowance to assign or subset, a tenant, who lays out his stock in improving his farm, hurts his own and his family's credit. It is a bar to improvement, and ultimately prejudicial to the landlord, as well as the tenant, to exclude assignees and subtenants.

tenant shall not be allowed to assign or subset this lease, till he has been at least three years in possession on the same. *2do*, He shall not be allowed to assign or subset the farm after mentioned, in portions, to be occupied by different persons (some necessary cottagers excepted), but as one farm, and for the whole remaining period of this lease, without the consent of the proprietor. † *3tio*, The proprietor shall be preferred, if he desires to have the possession, to any assignee or subtenant, on equal terms; and the tenant shall therefore be obliged to make him the first offer of the said lease; and for preventing collusion in this matter, the proprietor may insist that the terms of a renunciation to himself of the lease be adjusted by mutual arbiters: All and Whole the farm and lands of ————, and that for the space of fifteen years ‡ from and after the term of Martinmas next §, which is hereby declared to be the term of the said B.'s entry to the said farm, and from thenceforth to be peaceably occupied and possessed by the said B. and his foresaids, during the foresaid space. But declaring that the proprietor shall, agreeably to the laws and practice of Scotland, have full power to search for and work all mines and minerals in the said lands, and to make all necessary roads, and occupy ground for other necessary purposes thereanent; the proprietor always paying to the tenant surface damage, which in no case shall be less than double the rent of the ground so occupied; and otherwise, the same shall be ascertained by arbiters to be mutually chosen: And declaring also, that the proprietor shall

† Middlemen or Tacksmen, as they are called in different places, are debarred here, because they are considered as oppressive to poor tenants.

‡ The term of fifteen years of a lease seems to be fully a sufficient length of time for a farm that has been all cultivated, and requires no primary improvements by the tenant. If, indeed, it is a mountain farm, where no improvements are expected to be made by the tenant, six or seven years seem a sufficient length of time; but if, on the contrary, primary improvements, such as draining, enclosing, &c. are expected and covenanted to be made by the tenant, the lease may be properly granted for twenty, or even thirty years, a rise of rent being stipulated at the end of each ten years, which will be no more than justice to the landlord, while it will be a stimulus to the tenant to rouse him from apathy at the periods when the higher rents first become due.

§ Every term of entry has its special inconveniences to the parties concerned. Martinmas seems to have least to the incoming tenant in an arable farm, if the lease is guarded with a clause permitting the previous sowing of wheat, &c. and such other clauses as are expressed in this lease.

shall have power to hunt or fish on the said farm, not only himself, but to grant leave to others, they being liable in damages if they commit any waste, for which the proprietor may be obliged to grant redress to the tenant at the sight of mutual arbiters: And further declaring, that if any subdivision fences, or other fences shall be mutually agreed on, either now or during the period of this lease, the tenant shall be obliged to pay, in addition to his rent, and along therewith, at the rate of 6 *per cent. per annum* on the expense thereof, if disbursed by the landlord, or, if disbursed by the tenant, he shall receive, at the end of this lease, reimbursement to the extent of the full value of the said fences at the said period, to be ascertained by mutual arbiters: Further declaring, that the proprietor shall have liberty to plant and enclose, in a substantial manner, such portions of the said farm as he shall think proper, not exceeding acres, the manner of enclosing, as well as the deduction to be allowed for the rent of the ground so taken off, being always previously ascertained by mutual arbiters, the fences of the enclosure being kept in good repair by the proprietor and tenant jointly, and the tenant being liable in damages if he suffers cattle to destroy or injure the said plantations, or any other woods or plantations on the farm, and being obliged instantly to repair, at the mutual expense of the proprietor and tenant, every breach that shall occur in the fences of such plantations; which damages shall be due by the tenant for any destruction or injury, of whatever nature, of the woods or plantations on the farm, which he could possibly have prevented, and which shall be also ascertained by mutual arbiters: And it is further declared, that the tenant shall be obliged, at all times, to keep the houses, fences, gates and drains on the said farm in good order and repair at his own expense, except the fences of plantations, which shall be kept up at the mutual expense of the landlord and tenant; and if at any time the houses, fences, gates, or drains in the said farm, shall be found to be in disrepair, the proprietor may require the tenant to repair them within one month; and if any difference shall arise between them as to the extent or nature of these repairs, the same shall be submitted to mutual arbiters; and, failing the appointment of an arbiter by the tenant in one month after such requisition, the proprietor shall have power to employ persons to put the same in proper order; and the tenant shall be obliged to pay, along with his next rent, whatever the proprietor shall show that he has laid out on that account, whether the charge be esteemed by him to be high or low: And moreover, it is hereby declared, that if the tenant then in possession of this farm shall become bankrupt, or shall execute any voluntary trust-conveyance

of

of his property for behoof of his creditors, or be otherwise truly unable to perform the obligations on his part contained in this lease in a proper manner; then, and in any of these cases, this lease shall, at the option of the proprietor, be null and void, unless the tenant shall, within sixty days after he is required by the landlord, execute an assignation or subtack, of the nature before described, or renounce the possession to the proprietor, for such value as shall be ascertained by mutual arbiters: And further, it is hereby declared, that, at the separation of the last crop from the ground before the end of this lease, the proprietor, or incoming tenant, shall have power to enter upon, and plough the ground that has been in tillage that year, and may then, or sooner if they please, enter upon the fallow after mentioned; which tack the said A. binds and obliges himself, his heirs and successors, to warrant to the said B. and his foresaids, at all hands, and against all deadly, as law will. *For which causes, and on the other part*, the said B. binds and obliges himself, his heirs, executors and successors, to pay to the said A., his heirs or assignees, the sum of of yearly *money-rent*, * for the said farm, at the term of Whitsunday yearly, the sum of , beginning the first term's payment at the term of Whitsunday that shall happen a full year after the said B.'s entry to the said farm, with interest thereof from the foresaid term of payment till payment thereof, and a fifth part more of penalty in case of failure; but the last year's rent, whether in money or in grain, shall be payable fourteen days before the term of the said tenant's removal: And further, the said tenant shall deliver to the said A. and his foresaids, at any place desired by them, within twelve miles of the farm, betwixt Christmas and Candlemas, yearly, the following quantities and sorts of grain, viz. ; or otherwise, the second fiar prices of such grain for the county of , at the option of the proprietor: Also, the said tenant shall be obliged to pay the minister's stipend, and salary of the schoolmaster, for which he is to be allowed deduction out of his rent. Moreover, the said tenant shall labour, cultivate and manure the said lands in a husbandman-like manner, and not run out the same; and shall not, during the currency of the lease, have two white or culmiferous crops running; and, during the four last years of his possession, shall not have above

* From the diminution of the value of money, and other causes which have of late years so rapidly increased the value of farm produce, it seems but justice to the landlord, in a lease of even no more than fifteen years, to make a proportion of the rent payable in victual, perhaps to the extent of a half.

three fourths of the arable lands of the said farm under tillage at one time; and the other fourth, so in grass, shall be laid down in a proper husbandman-like manner, and with proper grass seeds, and after a naked summer fallow properly manured: the half of the remaining three fourths shall be, one half in green crop, and one half in naked fallow, unless the landlord shall, from the clean state of the farm, dispense with the said naked fallows, and admit of green crop fallows in their stead: And during no period of the said lease shall the tenant be allowed to dispose of any part of the produce of the said farm, except cattle, and grain thrashed out, * unless with consent of the landlord, and under condition of the tenant's bringing otherwise upon the farm a quantity of putrescent manure equal to what might have been derived from the commodities so carried off the farm; the straw of the last crop being excepted, which the tenant may dispose of on foot, or otherwise, as he shall think proper; and he shall also receive value, by the decision of mutual arbiters, for the third part of the dung that shall be upon the farm at his removal, but not for such as has been lying upon the grounds for a longer period than from Whitsunday previous to his removal. And further, the landlord having put all the fences and the houses on the farm in sufficient tenantable repair, and they being accepted as such by the tenant, the said tenant obliges himself and his foresaids to leave the same in like tenantable condition, ordinary tear and wear excepted; and to make good to the said landlord all damages which may accrue to the farm, or houses or fences thereon, by his carelessness; and also to defray any loss or damage that may happen to the houses by fire: And the said tenant binds and obliges himself and his foresaids, to flit and remove from the said possession at the expiration of this tack, without any warning: But if he shall remain after the said period, it is agreed to, and understood by the said parties, that the rent which shall thereafter be payable in the same manner as above specified, shall be doubled in extent; and the tenant accordingly hereby becomes bound for the said increased rent during the period of the tacit relocation; or, in the option of the landlord, the said tenant hereby grants warrant to the said landlord and his foresaids, to eject the said tenant and his foresaids, and to enter into possession of the said farm summarily, at their own hands, without any claim, action of damages, or hazard at law therefor whatever. And the said C., as cautioner for the said B.

* This lease does not apply, in this part, to an arable farm in the vicinity of a city, where great quantities of putrescent manure can at all times be purchased.

B. the tenant, and his foresaids, binds and obliges himself, his heirs, executors and successors, that the said tenant shall stock the said farm fully and properly; and also, that he shall sow the same the first year of this lease; and likewise that he shall pay the first year's rent, in the proportions, and at the terms above specified, with interest and penalty in case of failure, all as above expressed. And, lastly, both parties bind and oblige themselves and their foresaids to implement their respective parts of the premises, *hinc inde*, under the penalty of Sterling, to be paid by the party failing to the party observing, or willing to observe the same, over and above performance. And in all cases mentioned in this lease to be decided by mutual arbiters, it is hereby declared, that if either party shall decline to appoint an arbiter or arbiters within ten days after being required by the other party so to do, the Sheriff, or other Judge-ordinary of the bounds, shall, upon the application of either party, have power to appoint persons of skill to decide, and whose decision shall be final. And the parties consent to the registration hereof in the books of Council and Session, or others competent, therein to remain for preservation; and that letters of horning on six days charge, and all execution needful, may pass upon a decreet to be interponed hereto, in form, as effeirs. And thereto they constitute their procurators, &c.

In witness whereof, &c.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Expense of Enclosing Land.

SIR, *Haddingtonshire, 20th March*, 1809.

I OBSERVE in your Magazine, (No. 37. p. 98.), a query with regard to enclosing, viz. 'What may be the expense of enclosing 200 acres of land in Berwick or Haddingtonshires, supposing the land square, and to be divided into 8 enclosures of 25 acres each, by stone walls lipped with lime, and seven quarters high?'

The question is very distinctly put; and, if you do not receive an answer more to your mind, before the publication of your next Number, pray insert the following.

	Chains.
Two hundred acres make 2000 square chains; the square root of which is one side of the farm, viz.	44.72
Four outside and four inside walls of same length -	8
	357.76

	Chains.
Brought over	357.76
Deduce three crossings - - -	.06
Scotch chains - - -	357.70
English do. - - - -	401
Yards in a chain - - -	22
	8822

Now, at 7 quarters high, the length of a rood is 20.57 yards; therefore, $\frac{8822}{20.57} = 428.8$ roods of mason-work, if the farm is Scotch measure; but, if English acres are meant, 382$\frac{1}{2}$ roods.

This might be considered a sufficient answer to the query; as, upon that ground, any person can make an estimate according to his local circumstances. Yet I shall make one upon our common prices, and on the idea of driving two carts of lime, sixteen carts of stones, and four carts of sand per day.

One rood lipped work, including cape -	L. 1	4	0
Four bolls limeshells, at 2s. 3d., barley measure	0	9	0
Carriage of do. at 15d. per boll (4 bolls p. cart) -	0	5	0
Twenty-four double carts stones, at 9d. -	0	18	0
Carriage - - - -	0	15	0
Three and a half carts of sand, 3s. -	0	10	6
Carriage of water for lime - - -	0	1	0
Expense of one rood - -	L. 4	2	6
——— of enclosing 200 acres -	L. 1754	5	9

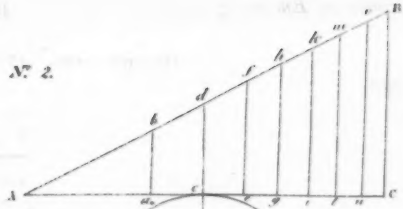
The expense will vary prodigiously, according to the price, and distance of materials.

It may be of some utility to show, that the expense differs also according to the figure of the farm. I here present four figures (see *Plate*), which fully demonstrate this. These figures all equally contain 200 acres. The circle (No. 1.) is the most capacious of all figures; and the triangle (No. 2.) the least, with regard to their boundary. The square (No. 3.) is least expensive, upon the whole, though the oblong (No. 4.) is the most easily *subdivided*. The triangle requires more both in boundary and division lines, as may be seen by the following note from the figures themselves.

	Boundary.	*Divisions.*	*Total Scotch Chains.*
The Square -	178.88	178.88	357.76
Circle - -	158.	201.52	360.02
Oblong -	223.60	156.52	380.
Triangle -	234.16	213.04	447.20

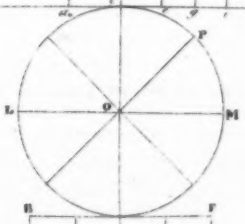
The

N.° 2.



AB = 100.
AC = 89.44
BC = 44.72

N.° 1.



LM = 50.30
OP = 25.10
PM = 19.75

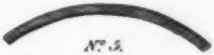
N.° 3.

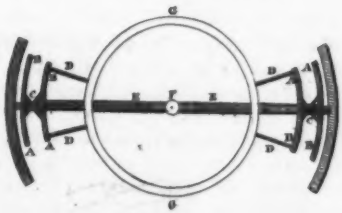
EF = 44.72

N.° 4.

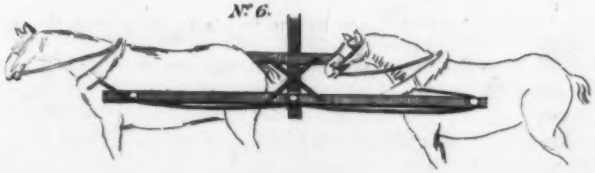
QR = 89.44
RS = 72.36
QG = 44.18

N.° 5.





N.° 6.



The figures are protracted from a scale of 20 chains to the half inch. The divisions of the triangle are projected by a very simple operation of logarithms, in a manner entirely new. Upon trial they will be found correct.

Chains.	*Distances.*
$a\,b = 15.80$	$A\,a = 31.61$ *chains.*
$c\,d = 22.34$	$a\,c = 13.12$
$e\,f = 27.38$	$c\,e = 10.04$
$g\,h = 31.62$	$e\,g = 8.48$
$i\,k = 35.36$	$g\,i = 7.45$
$l\,m = 38.72$	$i\,l = 6.75$
$n\,o = 41.82$	$l\,n = 6.21$
213.04	$n\,o = 5.78$
	89.44

As this mode of dividing triangular plots very often occurs to be necessary on farms, it may, on some future occasion, be distinctly shown. The method will apply to triangles of every description. I am, Sir, your most obedient servant,

CALCULATOR.

NOTE.

THE Conductor is highly obliged to the gentleman who sent him the above paper; and requests a continuance of his correspondence. From the statements given, it evidently appears that the expense of enclosing 200 Scotch acres of ground with stone and lime walls, cannot, in ordinary cases or situations, especially where the marches are irregular, be estimated at less than 2000*l.* Sterling, or 10*l.* for each acre of land that is enclosed. Now, if an annual charge of $7\frac{1}{2}$ *per cent.* is made on this outlay, the advanced rent will be 15*s.* per acre; though it is a matter of doubt whether an arable farm can be benefited to that extent by enclosing,—we mean where the culture of corn is the chief object. We will thank our ingenious correspondent for similar calculations concerning the expense of enclosing by hedge and ditch; and request he will hold in view the loss of ground by such fences.

N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR,

I SUBMIT to your consideration the following draft and description of a new mode of yoking horses in a thrashing machine, which has been thought by many people in this neighbourhood to be an improvement of considerable importance.

And I am yours, &c. M. H.

Description of Figure, marked No. 5.

(see *Plate*, facing p. 196.)

A B B repreſent a ſhaft curved in the ſame degree as the outſide or wall of ſhade, and fixed by the middle upon a beam of wood E E, which paſſes through the upright ſpindle F; and A B repreſent an inner ſhaft, placed juſt as near it as to allow the horſes room to work. The croſs, C, ſtays to keep the ſhafts firm.

D D, additional ſtays, up to the outer wheel G, from the ends of the inner ſhaft. The ſhafts placed about three feet four inches high from the horſe courſe.

A A, horizontal pulleys fixed upon the ſhafts by an iron ſteeple (ſecured by a ſcrew under the ſhaft), the foremoſt leg of which ſerves for the axle, and ſtrong enough to endure the draught of both the horſes. The outer pulley placed about five feet two inches from the beam; the inner nearly at ſame diſtance.

B B B are ſmaller pulleys to conduct the rope; in theſe, one leg of the ſteeple muſt be on the outſide.

A trace of ſeventeen feet in length, with a few iron links at the ends, by which it is hooked on the near ham of the leading horſe, then paſſed on the outſide of the guiding pulleys B B, but within the ſteeple (which the groove in the pulley admits); then, turning round, the pulley A (alſo within the ſteeple) is hooked to the near ham of the horſe behind.

Another trace is hooked in the ſame manner to the far ham of the leading horſe, and conducted by the guiding pulley B round by the outſide of A, and hooked to the far ham of the horſe behind. This far trace may be ſomewhat ſhorter than the other.

The advantages ſuppoſed to be derived from this mode of yoking the horſes, are, 1ſt, That each horſe has his own ſhare of the draught, as much as when yoked abreaſt with ſwingtrees, while the utmoſt length of lever is preſerved. 2d, In practice it has been found that the horſes go more ſteadily and uniformly, ſo as to approach nearly to the motion of a water-wheel, which muſt be greatly in favour of the machinery; and ſome raſh, unſteady horſes, that had been laid aſide as improper for the machine, have been tried, and found to work pleaſantly in this way.

It is recommended to put the quickeſt horſe of the pair to lead, as the horſe behind ſoon learns to keep his head up to the beam; whereas, if the leading horſe ſlacks, the other is prevented from drawing.

M. H.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Strictures on the Laird's Letter, Vol. IX. p. 294.

SIR,

HAVING much of the patriot in me, there is nothing which affords me higher pleasure than to see liberal and enlightened notions displayed by men in the higher ranks of society, who have it much in their power to put them practically in execution. I was therefore much gratified by that excellent and judicious paper under the signature of *A Laird*, which you gave us in your thirty-fifth Number. The good sense and correct reasoning with which he combated those poisonous opinions which you and some of your correspondents had (no doubt unthinkingly) brought forward, must have carried conviction to every impartial and candid mind. Every proprietor of land ought most seriously to meditate on your Laird's arguments; and endeavour to comprehend them in all their bearings; as, if he remains in the dark now, he can only have himself to blame.

I agree perfectly with your correspondent, that *long leases of nineteen years* are highly improper; and I consider an endurance of lease beyond seven years as prejudicial to the real interest of the farmer, the laird, and the community. By the time a lease has endured seven years, the farmer will most probably have improved his farm, and laid out his capital, and may then begin to derive some returns; which circumstance might lead him to wish to live, as he would absurdly call it, a little comfortably, by seeing a few of his neighbours now and then to dinner;—they would invite him again;—a competition might ensue between the families in the neighbourhood, which might bring them all to ruin. These consequences your ingenious correspondent has strongly argued to result from a person thriving as a farmer. Some of your shortsighted readers may be apt to say that they have found these consequences contradicted by their experience; and that, in general, when a man thrives as a farmer, he is then induced to greater activity, and is more anxious to make greater stretches to improve his farm to the utmost. It would probably be replied, on the other hand, by your correspondent, that some have acted otherwise; and why may not all? At any rate, it becomes every judicious proprietor to guard against the possibility of such fatal consequences to the farmer, the community, and himself. And above all, it is to be recollected, that, when the farmer begins to get his profits by having dressed his farm, he is then able to pay a greater rent to the landlord, into whose pocket your correspondent has justly assumed it as an axiom, the most

of the profits ought to go. This axiom, self-evident as it is, may perhaps, to the dull apprehension of some, appear not altogether correct; I shall therefore endeavour to set it in its true light. It is clear to all, that landholders are by far the most useful and most enlightened class of the community. They are our legislators, or have the power of electing those who are;—and how happy it is for the nation that they are so, must be abundantly evident to those who consider the perspicuity and mild wisdom which many of our acts of Parliament manifest, and the great tenderness for the good of the lower classes in society so much displayed in the game laws, the excise laws, and the whole system of taxation. When, again, we advert to that spirit of gaming, horse-racing, and debauchery of all kinds, which is so very conspicuous among the richer landholders, we must be deeply convinced of the incalculable benefits derived to the community by this class, when we consider that *private vices are public benefits*, as that excellent author Mr Mandeville has so well evinced in his 'Fable of the Bees.' It must therefore be apparent, that it is of the greatest consequence to the nation that the whole profits, except what are barely sufficient for the maintenance of the farmer and his family, ought to go into the pockets of the landholder, who is likely to apply them to such excellent purposes. And further, the farmer and his family are completely prevented from attempting to imitate the vices of their betters, in which they must ever come far short: and the extent of vice, the most beneficial of all things to the community, is promoted by the pockets of the landholder being better supplied.

Another advantage to be derived from giving leases for the term of seven years, is, that the farmers are thus kept in a proper degree of dependence on the proprietor, and are more subservient to his will. This, it may be argued, would have a tendency to damp their spirits, and stop their ardour for improvement. But such reasoners have not entered into the enlightened views of your correspondent, who shows the absolute necessity of checking that spirit among tenants, by denying them all encouragement to build houses, &c.; because, whenever they are in any comfortable situation, they instantly, as he so convincingly demonstrates, manifest a tendency to encroach upon the province of the landholder, by imitating his vices and absurdities.

I am perfectly of your correspondent's mind, too, that the clergy, in particular, ought to be depressed, as they are now become useless, owing to religion having gone out of fashion; and, of course, all the stupid notions which were once entertained, that a clergyman ought to be able to live in a comfortable way to maintain his respectability, are now quite obsolete. And I am

happy

happy to inform your correspondent, that, in a northern county, a proprietor of considerable note has given his clergy their small farms only from year to year, that they may not pretend to any degree of independence. This measure has likewise been strongly recommended to another great man by his factor, a most enlightened man, but is not yet acted on. It is certainly in a high degree worthy of being adopted.

It is however exceedingly to be lamented, that there is a very considerable body of proprietors who are totally unworthy of the situation in which they are placed. Your correspondent has given a gentle insinuation of this kind by naming some of them, Lord Sommerville, Sir George Mackenzie, &c. These men, adopting a set of notions at variance with those of your correspondent, seem anxious about the prosperity of farmers, not reflecting on the fatal consequences which might ensue. I would therefore humbly suggest to the superior wisdom of your Laird, whether it might not be worth while to bring a bill into Parliament to tie up the hands of such men, and prevent them from pursuing such destructive measures. This bill might contain various enactments of immense consequence to the landed interest: among others, the following ought not to be forgotten. 1. That no lease exceed seven years (this would tally exactly with that excellent provision in the Income bill, which requires a new valuation at the expiry of this term), and all leases already granted for a longer period be curtailed to the above time. 2. That all houses on farms fit to accommodate more people or cattle than absolutely necessary to the cultivation of the farm, be demolished, on pain of the landlord being declared incapable of holding lands. This will prevent the exercise of hospitality, which your correspondent has very properly denominated *nonsense*, in defiance of that antiquated blockhead the Apostle Paul, who has strongly recommended it.

I am Sir, your most obedient,

January 10th, 1809. A WOULD-BE LAIRD.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On an Evil which subsists among Reapers in some Parts of Scotland.

Pro Bono Publico.

SIR,

THERE is a ſhameful and diſagreeable evil that ſubſiſts among the farmers' ſervants in ſome parts of Scotland; and which I muſt beg

beg, nay inſiſt upon you, to make public in your valuable Miſcellany; for I confeſs I know no other way of aboliſhing the practice; and if any efforts of mine were ſupported by the Conductor of the Farmer's Magazine, I am pretty certain the evil would ſoon be no more. What I mean, is that of a ſtranger paſſing a field of reapers in the harveſt ſeaſon. If within hail of them, he is inſtantly laid hold of, and trundled over a ſheaf of oats or barley, till his upper garments are perfectly abuſed; and, even after this uſage, which he is obliged patiently to ſubmit to, caſh is demanded of him, which, if not inſtantly complied with, his pockets are rifled. I have been aſſailed different times by thoſe banditti; but the laſt attack was far beyond any thing I ever met with. It was, Mr Conductor, in the county of Fife, I think, about the middle of that ſhire, where I was arreſted ſuddenly, and on the King's highway, by a band of no leſs than ſeven ſturdy female reapers. One of them laid hold of my horſe's bridle; another laid hold of me by the arm; a third pulled off one of my boots; while a fourth put one of her hands into my breeches' pocket (for caſh, I ſuppoſe); and while I was remonſtrating upon the impropriety of her conduct, and that I was not accuſtomed to ſuch freedoms, another one, on my right hand, had actually got the two buttons out of the fore ſide of my breeches. I had no thought now, but abſolutely to be raviſhed. I repeatedly vociferated to the maſter, who was in the field, and at no great diſtance, but to no purpoſe. I then addreſſed them in language, not altogether the language of Canaan; called them every thing but ladies: neither had this the deſired effect, till one of them ſlily put her hand into my waiſtcoat pocket, and took from thence three ſhillings, all the ſmall money I had about me at the time, and ſo they walked quietly off with the booty. Had I had as many guineas, I would cheerfully have given them, to have got rid of thoſe very troubleſome daughters of *Ceres*.

That proſperity may always attend your Work, is the earneſt wiſh of, Sir, your moſt obedient ſervant,

Auguſt 1ſt, 1808, TRANSATLANTICUS.

NOTE.

THE above complaint is given to the public exactly in the words in which it was communicated to us; and ſhould it be exaggerated, we have only to plead that we had no means of detecting its fallacy. At the ſame time, we are in duty bound to ſtate, that no ſuch practices prevail in the diſtrict with which we are particularly connected, where the reapers are better diſciplined than to behave in the manner deſcribed by our correſpondent.

N.

TO

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On a Method of ripening Grapes on a common Garden-Wall, and the Introduction of a new Spring Wheat into Scotland, &c. &c.

SIR, *Forfarshire, 8th April,* 1809.

IT is long since any article has occurred to me worthy of being communicated to the readers of your useful Magazine. Two, however, have come to my hand lately, that, in my opinion, merit a place in it. The first may be found in one of the supplementary volumes of the Repertory of Arts. It is a method of ripening grapes on a common garden-wall in Scotland: and as this is professed to be done without glass or fire, some of your readers may be induced to try the experiment, which is an easy one; and to acquaint you with the result. The protection of our fruit-trees, by means of coarse woollen nets, has been found to answer so well, that they tell me the making of such nets is become a trade, by which some poor people earn a livelihood in this county.

The other matter I deem worthy of being more generally known, is a Spring wheat, long known and sown in the fens of Lincolnshire. Its value to Scotland may be judged of by the following extract of a letter from a Lincolnshire gentleman, whose name, had I thought of asking permission to mention it, would remove all doubt as to the fact. It bears date 3d April, 1809, and is transcribed here *verbatim*. '*I must set you right in one point. I did* '*not discover this wheat: it has been in use for many years in the* '*marsh lands of Lincolnshire, upon my estate. Orders are given* '*for shipping you a quarter of it. You will not be too late, as* '*we never sow in Lincolnshire till the last week in April, to be* '*sure that the wire-worm has done working: and we have sown* '*as late as the 10th May, and had our crop as good and as soon* '*as if sown sooner.*'

Allow me now to express my hopes, that the attempts to put our farmers on the footing of others, as to the Income-tax, will at length be crowned with success. Since taxes attached to goods sold by auction—to poor pedlars—to exports of our manufactures, and imports of their raw materials—to receipts and discharges—to feuing and leasing the smallest spot of ground to poor cottagers, with or without a dog—I turn my eyes from the hideous subject of taxation. But I lived in Holland, then burthened more heavily than we are now, and found it the richest and most flourishing, and highest cultivated state in Europe; and

and am ſometimes inclined to believe there is a charm in liberty that averts the evils of the moſt baneful ſyſtem of taxation. Under the ſhade of liberty, our land riſes in value and production; our houſes, clothes, tables, offices, all improve, as if we lived in an age of premiums, inſtead of taxes. But for poor widows, annuitants and penſioners, I can diſcover no oar, buſh or rope to ſave them from ſinking under the effects of our taxes, and the riſe of the price of every article of life in conſequence of them.

Yours, &c. DOMESTICUS.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On Moss Husbandry.

By the Reverend Mr HEADRICK.

SIR,

I BEG leave, through the medium of your uſeful and extenſively circulated publication, to offer a few remarks,

I. On the converſion of moſs into manure.

II. On the converſion of moſs into ſoil.

In an eſſay on manures, printed by the Board of Agriculture (of which I have preſerved no copy, and muſt ſpeak of it from indiſtinct recollection), I ſtated the ſubſtance of what had then come to my knowledge reſpecting the converſion of moſs into manure, by mixing it with dung or lime, or both; or by expoſing it to be moiſtened with foul water from the ſtables, cow-houſes, &c. I have ſince learned, that the method of mixing moſs with dung, recommended by Lord Meadowbank, has been practiſed in this county from time immemorial. Were the foul water which runs from Edinburgh, Glaſgow, Paiſley and other towns, collected in reſervoirs, and made to act upon moſs, a prodigious quantity of valuable manure might be procured. Mr Reid, of Ratho, long ago adopted this idea, collecting all the foul water that iſſues from his premiſes, into a reſervoir, where it is either mixed with moſs, cleanings of ditches, &c.; or is carried out and ſprinkled upon the land from a large caſk fixed upon a cart. When the cart arrives at the field, a plug is pulled out of the hind-end of the caſk, which admits its liquid contents into a croſs trough, faſtened on the back of the cart, whoſe bottom is perforated with holes. The horſe moving ſlowly along, the foul water is dropped upon the top of the ridge, as from a watering-pan. The conſequence is, that, when I laſt had an opportunity of ſeeing that gentleman's operations, inſtead of bringing dung from Edinburgh, at a vaſt expenſe, he was abundantly ſupplied from his own premiſes, and had even brought

brought into cultivation a conſiderable extent of waſte land from his own reſources. The good people of London waſh all their excrements, through ſewers, into the Thames, and then pump them up for drink to the inhabitants. The worthy citizens are not aware how much the contiguous land hungers and thirſts for a taſte of their drink.

But the ſubject to which I wiſh chiefly to call your attention at preſent, and that of your ingenious correſpondents, is a method of converting moſs into manure, without any mixture of lime, or dung, or any extraneous ſubſtance.

Soon after the eſſay already alluded to was ſent to the Board, I had frequent occaſion to be with my worthy friend, James Mylne, Eſq. at his farm of Blackbyres, near Paiſley. He has ſince become Profeſſor of Moral Philoſophy in the famous college of Pandemonium; and many regret that honeſt Farmer James ſhould have ſtumbled upon ſuch an intractable ſoil. At that time, Mr Mylne was operating upon a field of about twenty acres, which, being the moſt ſterile in his poſſeſſion, was left the laſt to be treated with fallow and manure. Patches of it had been formerly limed to exceſs, and then cropped with oats, until they no longer returned the ſeed. Parts of it carried ruſhes; and others ſtunted heath. A few ſandy and gravelly knolls carried ſtunted broom. Much labour was employed to make it dry, both by concealed and by open ſlope drains,—to level eminences, and to fill up hollows. The ſoil was chiefly a ſterile till, of a whitiſh or bluiſh colour, and apparently formed from the decompoſition of beds of pyritical and aluminous clay, which accompany the coal of that diſtrict.

At the ſouth end of this field, there was a hollow place, of about an acre in extent, occupied by moſs. This moſs conſiſted chiefly of the *ſphagnum paluſtre*, in a growing ſtate; and its fragments retained a white or yelloviſh colour, after being expoſed to the air: whereas, good peat is commonly of a mahogany colour at firſt; but ſoon becomes black. In order to drain this moſs, and reduce it to cultivation, a very large ſlope-drain was made along its boundary with the ſolid land. With the moſs thrown out of this drain, Mr Mylne reſolved to try experiments, with a view to aſcertain the moſt practicable mode of converting it into manure for his other land.

It was laid up in a long ridge, or *ſow* as it is called in Scotland, and part of it was mixed with dung, in various proportions, arranged in alternate layers. Part of it got various proportions of lime, arranged in the ſame manner; and part of it got various proportions both of lime and dung, there being always a ſtratum

of

of moſs interpoſed between the ſtrata of lime and dung. At laſt, however, the lime and dung were exhauſted, and no more of either could be procured; and a large portion of this moſſy *ſow* remained, without any mixture either of dung or lime.

After this large compoſt was made up, in the way deſcribed, it occurred to Mr Mylne, that the lime had rendered the moſs too dry, and that this might counteract its decompoſition. Scoops were therefore procured, and water was repeatedly thrown upon the whole heap, from a pure rill which ran in the drain out of which the moſs had been taken, from a copious ſpring in a neighbouring field. Poles were thruſt down here and there from the top, in order to convey the water into the interior parts of the heap. The whole heap was turned twice, and ſome of it thrice, and had water thrown upon it during the turning; while the larger clods were chopped and mangled with the ſpade.

The land having undergone a complete fallow, in order to admit a fair compariſon, part of it was manured with Paiſley dung, at the rate of about 4l. per acre value. Part of it got both lime and dung. The moſſy compoſt, beginning at the part firſt made up, was then laid as regularly as poſſible over the whole remainder of the field, and formed a very ſtrong doſe. The field afterwards carried a heavy crop of wheat; and Mr Mylne aſſured me, that neither he, nor the beſt judges he conſulted, could perceive any difference in the appearance of the crop, correſponding to the different ſorts of manure that had been applied. What ſurpriſed him moſt, and was leaſt expected, was, that the crop which had got only chopped and watered moſs, without either dung or lime, was fully as good as any of the reſt.

My ingenious friend, Mr Pitlow, at his farm of Deans, near Bathgate, has adopted what I take to be a great improvement in the converſion of moſs into manure, without addition. He lays out his moſs, at the depth of a ſpading, upon a piece of dry contiguous land. By expoſure to the air, and moiſture from the heavens, it ſoon begins to become brittle, and to moulder down into a friable ſubſtance. To haſten the proceſs, he lets in the plough upon it occaſionally, and cuts and mangles it in various directions. This has the effect of not only tearing it in pieces, but of expoſing new ſurfaces to the action of the air. When the moſs, treated in this manner, begins to throw up chick-weeds, he judges it to be ready for uſe. It is then mixed with dung, or lime, or both; which it ſerves to diſtend, and cauſes to produce a much greater effect than they otherwiſe would do. Or it is applied to the land by itſelf, and makes excellent manure, without the admixture of either dung or lime.

Mr

Mr Stirling of Carſbank, a gentleman whoſe ſkill and ſucceſs in agriculture are too well known to require illuſtration, is employed upon a ſimilar experiment at preſent, the reſult of which may be afterwards communicated. It may be obſerved, that the land on which this moſſy manure was laid, is what is called till, or cold bottomed land; and Mr Stirling's land is chiefly of this deſcription. I wiſh your ingenious correſpondents would try ſuch experiments with all kinds of land, and with various ſpecies of moſs, and report the effects. No two people underſtand one another when they ſpeak about moſs. An experienced eye can perceive very great differences in the properties of different moſſes, either as applicable for manure, or for being converted into ſoil. But it is not eaſy to explain in what theſe differences conſiſt.

Moſs, in its original ſtate, is macerated or infuſed in water; but it exhibits no ſymptom of putrefaction, or of chemical decompoſition. It is ſomewhat like wood and pitcoal, which undergo no chemical change while completely ſoaked in water, and excluded from the action of the air. But if you kick and agitate peat moſs in a very dark and moiſt night, it appears among your feet like flames of fire. Putrid fiſh, wood, leaves of trees, and a great variety of animal and vegetable matters, exhibit the ſame appearances, if they be moiſt, and expoſed to the air. I take theſe appearances to be owing to a ſlow *inflammation* or *putrefaction*, which does not ſeem to differ from inflammation, except in the inferior degree of its rapidity. A damp ſtack of hay or ſtraw has been known to putrefy ſo rapidly, that it actually took fire. A large heap of coals, eſpecially if they contained martial pyrites in their compoſition, when expoſed to air and moiſture, has alſo been known to take fire. The effect ſeems to be produced in conſequence of the decompoſition of water, and the abſorption of oxygen from the atmoſphere. The reſult of theſe proceſſes ſeems to be the formation of carbonated hydrogen gas, or *heavy inflammable air*, as it is ſometimes called; carbonic acid gas, carbonic oxide gas, and perhaps alſo of olefiant gas. All theſe gaſes are evolved during the putrefaction of vegetable ſubſtances; and they are obtained in great quantity when peat or pitcoal are ſubjected to the deſtructive diſtillation, in the formation of gas lights. It ſeems to be aſcertained, that the moſt fertile ſoils are thoſe which yield, by diſtillation, the greateſt proportion of theſe gaſes, and eſpecially of the firſt, or carbonated hydrogen gas. Now, I take it, that the expoſure of moſs, or any other ſubſtance which contains much charcoal, to the joint action of air and moiſture, cauſes the ſubſtance to enter into new, or gaſeous combinations, which remain attached to the earthy reſiduum; and, when mixed with the

ſoil,

ſoil, theſe gaſes are readily abſorbed by the roots in union with water, and contribute to the nouriſhment of plants. Pitcoal, as it contains a large portion of bitumen and oil, is not ſo readily acted upon by air and moiſture; and hence cannot ſo eaſily be converted into manure as moſs. But Mr Henderſon, at Hamilton, having occaſion to fill up an old coal pit, in order to get rid of a large maſs of coal-culm which remained after the pit was filled, ſpread it equally over a very ſterile field in the centre of which it was ſituated. He expected the culm would deſtroy the land entirely, until its fertility was recovered by liming and manures. But to his great ſurpriſe, the field being ploughed up, yielded ſeveral ſucceſſive crops as ſtrong as they could ſtand. It would ſeem, that the coal being trod on, and bruiſed by horſes and carts during the time the pit was working, had undergone the ſlow inflammation, and had been reduced to the ſame ſtate with moſs that had been treated as above deſcribed. Notwithſtanding all that my ingenious friend Mr Naſmyth has ſaid in his late treatiſe on moſs, and the fertilization of land, I am ſtill diſpoſed to entertain doubts, whether charcoal can be ſo completely diſſolved in water, as to enter into the extremely minute veſſels of plants. Charcoal may indeed be diffuſed through water in very ſmall particles; but it does not ſeem to admit of perfect ſolution, like ſugar and other ſalts. Thoſe plants, which admit of collecting their ſap in any examinable quantity, always exhibit this liquid in a frothy ſtate, or blown up by ſmall bubbles of aërial or elaſtic fluids. I am therefore inclined to think, that charcoal enters plants in union with hydrogen or oxygen, in which combinations it forms a conſtituent ingredient in the compoſition of an aërial or elaſtic fluid. In ſupport of this, it may be mentioned, that ſeveral farmers, of the greateſt experience, have aſſured me, that they have known fields apparently exhauſted, ſo as not to be thought worth ſeed and labour, recover more fertility by a naked fallow, than they could have done by a dunging at the rate of from 4l. to 5l. per acre. Though part of the effect may be aſcribed to the extirpation of weeds, I am inclined to think, that much of it was owing to the turning up of the ſoil, and expoſing the charcoal it contained to the action of the air; and thus exciting in it a new formation of gaſeous products.

But I forget that, when I began, I meant to confine myſelf to the ſtatement of a few ſimple facts; and I doubt not but you and your readers may think I have digreſſed too far into the regions of theory and conjecture. Whatever opinion you may be diſpoſed to form of my theory, you may be aſſured, that moſs was converted into a very valuable manure, without any addition whatever,

by

by the means already described. I could wish, as already hinted, that your ingenious correspondents would try the experiment with moss of every description, and ascertain the effect of its application to every species of soil. In agriculture, as well as all the experimental arts, one well authenticated fact is worth a thousand theories. But I proceed to offer a few remarks.

II. *On the Conversion of Moss into Soil.*

In an essay on the improvement of waste land, which was published, I think, in the Second Volume of Communications to the Board of Agriculture, I entered very fully into my friend Mr Smith of Swinridgemoore's method of improving moss, and detailed several chemical experiments I had made upon that subject. I found that the alkalies formed a species of soluble soap with moss; but that lime and the metallic oxides formed insoluble soaps with moss, as they do with the fixed oils. After the combination of lime and moss is effected, water no longer dissolves any of the ingredients; and hence, water which runs from a moss which has been wrought and limed, is limpid and pure; whereas that which runs from an unlimed moss, is of a dark porter colour, and contains an infusion of the mossy matter. If you drop a small quantity of lime water into moss water, it soon carries down all the mossy matter, leaving the water limpid and pure. As Captain Cooke ascertained that moss water never putrefies, though ever so long kept at sea, I conceived this fact might be usefully applied for procuring fresh water for our seamen. Lime also extracts from moss a considerable portion of tannin; for, after being digested with fresh moss, a limpid extract may be obtained, which produces an inky precipitate in a solution of sulphate of iron.

But, without repeating what was fully detailed in that essay, I shall proceed to lay before you an experiment of the same ingenious gentleman to whom I have so often referred, namely, Mr Pitlow, at his farm of Deans, near Bathgate, who has succeeded in converting into very fertile soil a considerable portion of moss, without the application of lime, or dung, or any manure whatever.

Mr Pitlow's moss always appeared to me to be one of the worst that could possibly be selected for conversion into soil. Its surface was occupied with tufts of coarse grass and heath, with various species of lichens, with sphagnum palustre, which frequently formed knolls, in which you would sink as into a bag of wool. The intervals of these plants were furrowed out by water, which frequently collected in basins; and it required much caution to walk over the moss, so as to avoid dropping out of sight. When the water was evaporated, during summer, from the basins in which it had stagnated, the moss at the bottom had a very

strong styptic or astringent taste, somewhat resembling that of sulphate of alumina.

Mr Pitlow's first care was, to dig a long and deep drain to discharge the water from the outlet of this moss; in making which he came upon a good seam of coal. He then made drains between the moss and the solid land on each side, and another up through its centre. Other drains were run across from side to side, so as to divide the moss into regular fields, of from eight to ten acres. These drains were made so deep and wide that they serve all the purposes of fences. He then tried various methods of reducing the moss into cultivation; such as paring and burning; delving into ridges with the spade; and then liming, dunging, &c. His moss was of such a porous and untractable nature, that none of these methods succeeded. On one field, from which the upper stratum had been removed by casting peats, he laid a very strong dose of compost of lime and clay. Here, indeed, he had excellent crops; but he thought the experiment was too expensive to be persevered in.

The plan he at last adopted was, to trench his moss, to the depth of from two to three feet, by which he throws down the porous woolly stuff, with the heath and coarse herbage, to the bottom; while a more dense and compact species of peat is thrown up, to form a soil upon the surface. The trenching is executed in regular spits, or courses, crossing from one main drain to another. The bottom of each course is shovelled and smoothed, so that water cannot remain stagnant on any part of it. The superficial turf is cut of a spading depth, of a parallelogramic form, and as large as can be easily turned over. These turfs are regularly arranged, with their herbage downwards, upon the smoothed bottom of the preceding trench; and upon them are spaded the beds of moss below, the order of their position being reversed. What was formerly lowest, is now made uppermost; and the superficial clods are champed and mangled with the spade while they are placed in their new position.

At regular distances, of from forty to fifty feet, subterraneous drains are cut through the under moss, or that part of it which was not stirred by the trenching. These are made parallel to each other, and cross from one open, or main drain, to its opposite; in both of which they terminate. Their terminations form equal-sided triangles in the sides of the main drains; and they perpetually discharge a highly acrid and astringent juice. These concealed drains are made to cross the declivity of the moss, where it has any sensible declivity; so that all water which percolates between the heathy or porous stuff which formerly occupied the surface, and the denser peat below, cannot fail to get into them. These drains

drains are made by a scoop, which is about eighteen inches long, about one inch broad at the point, or lowest part, and from three to four inches broad at the top, into which a handle is inserted like that of a common spade. The rut being formed by this scoop, is covered by those superficial turfs which contain most heath, or coarse herbage. The moss is now allowed to remain to gather fertility from the action of air and moisture, its laceration and disorganization being hastened by frost. Or, after it has acquired sufficient consistency to bear the tread of cattle, a light plough, drawn by a single horse, is let in upon it, to cut and mangle it in various directions, and expose new surfaces to the air. No ridges, nor water furrows, are formed in this moss; the concealed drains serving the purpose of the latter. It exhibits the appearance of a smoothed lawn.

When Mr Pitlow sees chickweeds beginning to abound in moss prepared in the manner described, he sows grass alone, without any corn crop. The chickweeds, as in the case of moss prepared for manure, he regards as an evident symptom that the subject thus operated upon is rendered fertile; and though not of sufficient density to carry corn, is able to carry a luxuriant crop of grass.

The last time I had the pleasure of inspecting Mr Pitlow's operations, was towards the close of January 1807, when I was on my way from the island of Skye to Edinburgh. I had seen all his former operations on his moss, and was obliged to confess that some projects, in which I was very sanguine at their commencement, had proved abortive. At this visit I saw a considerable extent of moss, the original horrors of which were distinct in my recollection, carrying a most luxuriant crop of grass. The grass was distinguished by its lively verdure, even in the depth of winter; and I thought the moss, prepared in this way, worth from 4*l.* to 5*l.* per acre for ever in pasture. An extensive field of solid land, on the other side of the ditch, had been laid down in grass at the same time, after fallow, liming and dunging; and it appeared to be very inferior in value to the grass upon the moss.

From the success of this first experiment, Mr Pitlow had then a much more extensive tract of his moss in a course of preparation to be treated in the same manner. As these operations were carried on at intervals, when his men had nothing else to do, he could not condescend upon the expense per acre; but he assured me it was not great, as the materials were soft and easily moved. I think there can be no doubt but, after this grass has been depastured for a few years, the moss being reduced to a friable earthy substance, may carry heavy crops of any species of corn. During the ensuing summer he proposed to fold sheep upon the tract then in a state of preparation, in hope that the tread of

their feet, together with their droppings, would very much accelerate the putrefaction, or decompostion, of the moss. Mr Pitlow thought that this mode of improvement would be well adapted for our Scotish Highlands (the improvement of which having long been his favourite object), where he presumed there was neither lime nor dung to be got, but where there are abundance of sheep. He thought that, without folding, were the sheep only enticed to sleep on moss prepared in this way, where they would always find a dry bed, and to resort to it occasionally to ruminate or scratch themselves, the extensive mosses of the Highlands would soon be converted into fields of the highest fertility, either for grass, green crops, or corn. I am likewise inclined to think, that mosses rendered fertile in this manner, might carry luxuriant crops of flax and hemp; and thus our Navy might come to be upheld from our own resources. That improved moss yields excellent potatoes and other roots, is already well known. A very large proportion of the mosses which abound in the Highlands and Isles of Scotland, are already gardens of Eden compared with that on which Mr Pitlow was operating. I think a glance of my eye can distinguish the qualities of moss; and his is among the worst I ever saw, either for being converted into manure, or into soil. The part I saw carrying such luxuriant grass, had never been touched from the time it was trenched, until it was sown down.

I hence think that the proposition I meant to illustrate, namely, that moss may be converted into valuable manure, or into very fertile soil, from its own energies, without foreign admixture, is clearly established by facts, to which reference is made.

In many of our upland pastures, generally stocked with sheep, extensive sheets of moss occur, which are clothed with a thick matting of coarse herbage. These places are too elevated in the atmosphere to admit of expensive improvement. But to increase the quantity, and render highly nutricious the quality, of the herbage they already carry, seems an easy task. Such mosses should first have a ditch thrown round, between them and the solid land; and one, if necessary, led through the centre. Their surface should then be cut into spaces, resembling the ridges in tillage land, by a draining plough. Where these ruts fail to discharge the superficial moisture, a little aid of the spade is necessary, to convey the water into the nearest drain or rivulet. Without going further, this operation alone will very much improve the herbage, and render the ground a comfortable bed for sheep or cattle. If moles should stop up the ruts, they can be cleared, when necessary, by a light plough, drawn by a single horse. But if what is thrown from the drains, together with the fur-slices

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thrown from the ruts, be dried, piled into large heaps, and burnt, or rather charred; the ashes, being spread over the surface, will very much improve the quantity and quality of the herbage, care being taken to sow the bottoms of the burnt heaps with the best natural grass seeds which grow in the neighbourhood. If the whole can be followed by a top-dressing of lime, marl, sea-weeds, or any mineral or putrescent manure, the ground will throw up a more valuable crop of hay, or pasture grass, than any that can be raised by grass seeds sown upon ground after fallow and expensive manuring.

Every one who has walked over our upland, or mountain sheep pastures, must have observed that he is generally soaked, and often up to the ancles, even in the driest weather, in moisture; and that the poor devils of sheep never resort to such places (forming a hundred acres at least for one of our Highland pastures), unless compelled by absolute starvation. There the poor creatures paddle like ducks, up to the bellies in water. Having stuffed themselves with trash which merely fills their stomach, but yields them little nutriment, they have too much sense to lye down and ruminate, or to sleep in places which nothing but irresistible necessity could compel them to touch. They retire to dry ground, where they make their dessert; and if this be scanty, they often tear and scrape the grass out from the lowest roots. Now all this wet ground is not only useless, but highly detrimental to sheep; and the source of most of the diseases to which that valuable animal is exposed. If subterraneous springs erupt, they should be conducted into the nearest rivulet. But the principal source of the mischief is water descending from the higher ground, and, in its progress, rendering miry the ground lower situated. This should be intercepted by ruts drawn diagonally across the declivity by a draining plough.

I am afraid, Sir, of getting tedious, and of intruding further into your esteemed work than your room may admit. What I have said about improving upland pastures, is all founded upon experiments conducted by myself. For particulars, I must refer you and your readers to the Second Volume of Communications to the Board of Agriculture, as before. There is only one experiment which I did not communicate to the Board, because I did not then see its result. A very large field, of a cold till soil, more than 1000 feet above sea level, so sterile that it carried only stunted heath, and the hollows where water stagnated carried rushes; the lower herbage being chiefly lichens, and sphagnum palustre, known in this country under the name of *fog*. Even these plants, though they matted the surface, showed no great inclination to grow. This land was subjected to a drill fallow, according to the mode invented by Mr John Mackenzie of Glas-

gow, to the extent of throwing it into three fur drills, and then left to its fate. I had afterwards an opportunity of viewing this scene of my operations on 9th July 1805. The field alluded to seemed sprinkled with snow from white clover, and the drills were clothed with a thick mat of the most nutricious grasses. I hence infer, that in order to improve the herbage of moorlands, you have only to throw the land into drills.

These improvements may be carried as far up the sides of our Highland mountains as there is climate to nourish grass.

At mention of the Highlands, I begin to recollect many mosses, both on the Mainland and Isles, where the occasional regurgitation of streams raises the most luxuriant crops of grass—grass that looks more like young trees than such grass as we are accustomed to see; and it is highly palatable to cattle. On tracing these streams to their source, I found they either flowed from lakes abounding in shell-marl, or from springs erupting from immense rocks of marble and limestone, sometimes including fossil marl; or from burns descending from higher mountains, and crossing immense strata of limestone and fossil marl. These circumstances suggest the propriety of first draining the mosses so favourably situated, and then subjecting them to a watering system. The Highlands and Isles of Scotland are better adapted for grass; for potatoes, and every species of esculent root and green crop; in very many cases for forest trees, sufficient to keep up our Navy, than any part of the British island I have yet seen. In general, the inhabitants ought chiefly to live on potatoes with other roots and plants, and fish taken from fresh waters, or from the sea. The cultivation of corn ought not to be pushed beyond the limits of absolute necessity.

I am now engaged in a survey of this county for the Board of Agriculture; and as it is not possible for me to wait personally on every ingenious and intelligent man in the county, I hope you will not consider it as intrusive, if I should solicit information, through your medium, from your readers in this county, who are very numerous. And I remain, with friendship and esteem,

Sir, yours, &c. JAMES HEADRICK.

Dunichen by Forfar, 20th April, 1809.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Observations upon the Property-Tax.

SIR,

THE Property-tax, as it affects occupiers of land, having appeared to me in a different point of view, to that in which some of your correspondents have considered it, (see Nos. 34. 35. & 36. of the Farmer's Magazine), I beg leave to offer a few observations on the subject.

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I am well convinced, that no fair and equitable mode of assessing the actual profits of farmers (instead of estimating the tax as at present, from the rent or annual value of land) has been yet known to the legislature; and I fear that there are difficulties in the way of such a plan, which never can be disposed of. In England and Wales, we have many farmers who can neither write nor read; and the few who could keep regular accounts of their profits, very rarely take the pains to do so.

I write as an occupier of land to some extent, and as a friend to agriculture; and I have acted as a commissioner under all the Income and Property-acts of Parliament. From these circumstances I feel, as a farmer, that the tax is unequal; but as a commissioner, I am of opinion that the tax would be still more unequal, if it were attempted to be estimated on the actual profits. Whether the profits of the farmer are at present rated too highly or not, is a question which I leave to the decision of more competent judges.

There is one matter which does not seem to have been taken into the farmer's account,—I mean his stock or capital; which, if otherwise employed, would be liable to the Property-tax. Suppose a farmer in Scotland rents 100*l.* a year; his profit is rated at 50*l.*; which includes the profit on his stock, and the value of his own personal labour. If, on a fair average, he does not make that profit, one would apprehend that he had either made a bad bargain with his landlord, had been extremely unfortunate, or that he was unqualified for the farming business. The profit is, of course, meant to include the maintenance of the farmer, (and his wife and children, if he has any), all which are rateable portions of income; and even the house which he inhabits, if unconnected with the farm, would be subject to a distinct rent to the landlord, which would operate as a deduction from the income of the occupier, the same as if he were to pay so much to the Property-tax.

Were the farmer to sell his stock, and lend his money upon private security, purchase land, or convert it into an *annuity*; although *he had been within the exemption from the tax as a farmer*, he would become liable to *ten per cent.* tax, either on the interest of his money, the rent of his land, or even on the amount of his annuity, however small his income, however large his family, and without any deduction being allowed.

If an English or Welsh farmer rent 100*l* a year, he is not within the exemption from the tax, but he must pay, on the presumed profit of 75*l.*, - - - - - - L. 7 10 0
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Yet I dare say, that one half of the rent in Scotland may be equal to three fourths of the rent in England and Wales, in estimating the proportion on which farmers are rated to the Property-tax; because the deductions from the farmers' profits in England and Wales, in the way of tithes and parochial assessments, must reduce their rents, as the exemptions from the same must increase the rent of land in Scotland.

I cannot but contend, that the mode of estimating the tax from the rent or annual value of land, is the only general plan which can be adopted with effect; for if the tax were to be assessed on the actual profits, it would be easily evaded. Suppose, for instance, that a man occupied a farm of his own, and found that it was capable of great improvement; he might determine to expend the whole or more than his profits for several years in improving his land, so that it would appear from his accounts, that he was actually sinking money on his farm: in what manner could his profits be estimated? surely not from his accounts? And what land-surveyor could pretend to say how far the *expenses* of this or that improvement, should be considered as a *profit* rateable to the Property-tax? The cases of this sort would be so numerous and so varying, that it would be impracticable for the Commissioners to execute the acts of Parliament, either with satisfaction to themselves, or to those interested in their decisions; and your readers may judge what would be the consequence. Besides, few farmers would like an investigation of their private accounts, of the manner of managing their farms, and of their skill in particular branches of agriculture; which, like the secrets of a trade, they would not willingly submit to the examination of the commissioners.

That many branches of trade are at this time subjected to such inconveniences is true, and I earnestly wish that it could be avoided; for the reluctance with which tradesmen bring forward their books for the inspection of the commissioners, induces many a one to pay a heavier tax than he ought; while others submit to assessments with pretended dissatisfaction, and withhold their accounts, which would prove their profits to have been underrated.

There are very many cases which might be adduced to show, that the Property-tax is not so equitable in its bearings as could be wished; nor indeed so much so, as it might easily be made. The salaries of curates should, in many cases, be allowed to be deducted by clergymen, and the keep of a horse by some tradesmen and others, particularly by country apothecaries; the small annuitants, although they may be parties to the deeds under which they enjoy their pittances, the tax upon interest of money, and rent of land, should, under many oppressive circumstances, be reconsidered,

considered, when incomes are small, or where there are large families.

But as this letter was intended only to moderate the complaints of one respectable class of people, who, I apprehend, have not clearly understood the advantages which, comparatively speaking, they possess under the property acts; I shall leave the other points, which I have slightly mentioned, to some abler advocate; but nevertheless, with the conviction, that they have a very just claim to the consideration of the legislature.

I am, &c.

Shropshire, March 22, 1809. T. N. P.

REMARKS BY THE CONDUCTOR.

If more was not meant than merely to moderate the complaints of farmers against the Property-tax, we are afraid that the object of our correspondent, in sending us the above paper, will not be accomplished. In fact, he neither assigns a solid reason why farmers should be satisfied with the tax, nor attempts to refute one of the many arguments urged against the assumed criterion of assessment. From a desire to be impartial, we have given him a hearing, though, in our humble opinion, the cause advocated by the Commissioner would not have suffered much, had the paper been peremptorily rejected.

But let us examine more particularly what is stated, when probably it may appear that some of the Commissioners' arguments cut two ways. In the second paragraph, he admits that no fair and equitable mode of assessing the actual profits of farmers has yet been known to the Legislature. This is true; and has in substance been loudly urged by farmers as a reason why the existing law should be amended. As the Property-act stands, none but farmers can be taxed for income not actually enjoyed. The monied and landed interests are fairly dealt with, because not one of these classes can be taxed a single halfpenny, unless funds are in hand out of which the tax is to be deducted; and as to merchants, manufacturers and others, it is their own fault if they are overtaxed in the slightest respect. They make a return of gains and profits in the first instance, to which, no doubt, the assessor or surveyor may add a surcharge; but upon this surcharge they have a right to be heard before the Commissioners, and to disprove the extent of it. None of these liberties, however, are allowed to the farmer. His income is ascertained, not according to the amount of his profits, but according to a hypothetical rule, unfounded in principle, and unapplicable to the general situation of those upon whom it operates. Why those concerned in agriculture should be so harshly treated, we are at a loss to learn. That class of men

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are certainly not the moſt uſeleſs of the community; but, whatever may be their merits, they are at all events entitled to participate of the ſame juſtice as is diſpenſed to their trading and manufacturing brethren. Were farmers, like traders, allowed to make returns, no more than juſtice would be done to them. Their incomes are equally fluctuating and precarious with thoſe of other profeſſional people; therefore, while the hypothetical rule is retained, which on all hands is confeſſed to be an unequal one, we muſt declare, with our correſpondent, that no fair and equitable mode of aſſeſſing the *actual* profits of farmers has yet been known to the Legislature.

Whether the Property-tax would or would not be more unequally aſſeſſed upon farmers, were returns permitted, is a queſtion out of our way to anſwer; becauſe the reſult muſt depend entirely upon the faithfulneſs and integrity of commiſſioners in the ſeveral diſtricts. But one thing is clear, namely, that by adopting ſuch a mode, farmers would eſcape that grievous oppreſſion hitherto exerciſed upon them; whilſt none of them would be ſubjected to aſſeſſments for more income than was actually poſſeſſed. The inequality of income-taxes has been felt in every country where that mode of taxation was reſorted to, and was ſtrenuouſly urged in Parliament againſt Mr Pitt's firſt bill; but it is not the kind of inequality here alluded to which farmers complain of. They do not complain that A pays more than B; or object to the tax, becauſe income from labour ſhould be more leniently aſſeſſed than that which ariſes from ſources of a more permanent nature; but ſolely becauſe they are rated for incomes which are not poſſeſſed. The inequality well known to prevail in the returns made by merchants and others, has never been held out as a reaſon why the act, as applicable to the trading intereſt, ſhould be altered and amended: therefore, withholding the privilege from farmers of making returns, and continuing the rule which fixes their incomes at one half of rackrent, muſt be conſidered as a meaſure by which juſtice is ſacrificed, in order that conveniency may be promoted.

We are not aware of a profound diſcovery being made, when reminded that the intereſt of the farmer's capital ſtock remains untaxed; though our correſpondent gravely adduces that circumſtance, as if it tended to leſſen the objections urged againſt the hypothetical rule aſſumed for aſcertaining the farmer's income. Surely neither rent could be paid, nor income produced, without capital ſtock. In whatever way income may be aſcertained, whether by a fixed rule, or by a ſpecial return, the annual worth of the capital employed muſt neceſſarily be included. The like takes place with the ſtock of merchants and traders. In ſhort, we are

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at a loſs how and in what manner the circumſtance ſtated can be brought to bear upon the ſubject under conſideration. Undoubtedly, if money laid out in ſtocking a farm was lent upon bond, 10 per cent. would be levied upon its annual intereſt; but it does not follow, when the ſame money is laid out in the culture of land, that a hypothetical rule ſhould be adopted for aſcertaining the profits of the owner. Suppoſe that a farm of 400 acres of land requires 3000l. of capital ſtock; the intereſt of that ſum is 150l., which would pay 15l. of property-tax. Now, 400 acres of decent arable land are not to be had, in Scotland, at leſs than 1600l. of rent; and the tenant's property-tax who pays that rent, according to the hypothetical rule, is 80l., or 65l. above the ſum he would have paid, had the money employed as capital ſtock been lent upon bond, or inveſted in government ſecurities. But this is not all. If the farmer actually poſſeſſed 800l. of income, the tax would deſerve leſs conſideration; but very probably his neat income, after defraying tear and wear upon live and dead ſtock, does not exceed twelve and a half per cent. upon the original capital inveſted, or three hundred and ſeventy-five pounds Sterling. If we are right in theſe calculations, it will appear that profits ought not to be eſtimated as exceeding 24 *per cent.* of rent, when a farm is rackrented. Every general rule, however, is liable to exceptions, and, if neceſſary to be adopted, ſhould rather be below the mark than above it.

We are ſatisfied that the great body of farmers are perfectly willing to pay 10 *per cent.* out of their actual profits, in aid of the public expenſes, ſeeing that the exigencies of the times call for an extraordinary taxation. Their complaints, however, are not againſt the Property-tax, but againſt the rule laid down for aſcertaining the extent of their profits. Now, how does our correſpondent ſupport the rectitude of the rule? Why, by ſuppoſing that the Scotch farmer, who did not enjoy 50l. of profits for every 100l. of rent, muſt, in the firſt place, either have made a bad bargain; or, in the ſecond place, have been unfortunate; or, in the third place, was unqualified for buſineſs. All theſe things may be very true, though they furniſh no defence for the hypothetical rule animadverted upon. Granting that the landlord has driven a hard bargain with the farmer in the firſt inſtance, it does not follow that the hardſhips of the bargain ſhould be increaſed in a proportional manner by the government of the country. The principle of the act is to levy a tax upon income, not upon ignorance; and ſurely, the man who is unfortunate, or unqualified for buſineſs, muſt poſſeſs a ſmaller portion of income than he who is gifted by nature with a larger ſtock of abilities. In fact, the ſuppoſitions of our correſpondent, inſtead of giving ſupport to the hypothetical rule, according to

which

which farmers are rated under the Property-act, diſplay its abſurdity in the moſt forcible terms. Indeed, no perſon can view the rule as correct, unleſs he believes that all farms are ſet upon equal terms; and that the poſſeſſors, each and every one of them, are gifted by nature with the ſame meaſure of knowledge and abilities.

The laſt particular which ſhall be noticed, is the following paſſage. 'Suppoſe,' ſays our correſpondent, 'that a man occupied a farm of his own, and found that it was capable of great improvement, he might expend the whole, or more than his profits, in improving his land,—ſo that it would appear, from his accounts, that he was actually ſinking money on his farm,—in what way could his profits be eſtimated?' We anſwer, ſuch a caſe cannot in the nature of things occur; becauſe there can be no profit from the culture of land, till the expenſes of cultivation are defrayed; but if it did occur, and if the mode of culture adopted tended to meliorate or improve the premiſes, government, at an after period, would receive an increaſed tax from the land which had been thus improved. If the tax was actually upon gains and profits, every improvement which added to the wealth of the poſſeſſor would in like manner tend to increaſe the public revenue. Our correſpondent, however, wiſhes to rip up the gooſe, and get at the golden eggs, before they are naturally produced; otherwiſe, why all this extreme anxiety to load the cultivator of land with taxes, at a period when, by his own account, no diſpoſeable balance remains, which, properly ſpeaking, can be conſidered as income?

But, in arguing this point, our correſpondent prudently refrains from noticing that abominable clauſe, which directs that a revaluation ſhall take place at the end of ſeven years, when every farmer may be taxed in direct proportion to the extent of improvements previouſly executed. Upon this head, a good deal might be urged were it neceſſary; but, in noticing a paper from the ſiſter country, where ſuch a clauſe, ſo far as we can learn, remains unexecuted, it would not be fair to uſe arguments perfectly applicable to that part of the act, as it has been adminiſtered in North Britain. Our correſpondent ought however to have conſidered, that revaluation is one of the chief grievances complained of by the Scotiſh farmers, and, when commenting upon their complaints, ought to have conſidered them in all their bearings and conſequences. Theſe matters, however, are altogether unattended to. Neither does he reflect, that the term *rackrent* has a very different meaning in the two countries. In Scotland, where the landlord pays all public burdens, rackrent includes all that the Engliſh tenant pays to the church, the poor, and the government,

government, which, in many inſtances, is a great deal more than the nominal rent covenanted to be paid to the landlord. But rackrent, in England, means no more than the ſum which the landlord receives; and, of courſe, it is only upon that ſum the farmer's profits are calculated. Again, in Scotland, labour being lower in value than in England, farmers are enabled to give a greater ſhare of the produce to the landlord as rent, than is practicable with Engliſh farmers. None of theſe things are noticed by our correſpondent in the way their importance merited; nor does he inform us, that, though rent is comparatively low in England, it has ſeldom been the criterion taken for eſtimating profits. According to our information, the farmer's property-tax has in many counties been calculated by the rule uſed for aſſeſſing the poor's-rate, without calling for a production of leaſes, or reſorting to revaluation. If this is the caſe, it need not excite ſurpriſe, that Engliſh farmers are not ſo much diſſatisfied with the Property tax as their Scottiſh brethren, upon whom the tax has been aſſeſſed according to the ſtrict letter of the act. Indeed, from all we can learn, the Property act has been adminiſtered ſo differently in the two countries, that, were the contrary not ſufficiently known, we would be led to infer that ſeparate acts had been paſſed by the Legiſlature for regulating and levying aſſeſſments.

That we are not without authority when making theſe remarks, will appear from the following extracts. The firſt is from a letter ſent by a gentleman in Yorkſhire, to whom we applied for information; and the ſecond from the minutes of a meeting of Scotch members of Parliament, held in London on the 25th April laſt.

'I am well convinced that the Property-tax act muſt operate with great ſeverity upon the Scotiſh tenantry, all their payments for land being in ſhape of rent; whereas the Engliſh tenantry, who in fact pay only a ſmall proportion of the actual rent *to the proprietor*, are by no means injured under the adminiſtration of the act. The ratio of taxation in fact is moderate, at leaſt hereabouts, twenty ſhillings per acre being the full average of rent on which the tax is calculated. If the rent returned is deemed too low by the commiſſioners, they have power to amend it; which they generally do by a reference to the poor's-rate aſſeſſment. Hence you will diſcover that the Engliſh tenantry have not the ſame reaſon for diſſatisfaction as their Scottiſh brethren; and it certainly is a ſerious reflection againſt your repreſentatives in Parliament, that they ſuffered ſuch an intolerable and unequal burden to be laid on, without giving the meaſure that degree of oppoſition which it merited.'

'At

'At an adjourned meeting of members of both Houſes of Parliament connected with Scotland, for conſidering of, and adopting the proper mode of obtaining relief to the farmers in Scotland, from the preſent mode of aſſeſſing the Property-tax on them,—Mr Adam ſtated, that he had not been able to procure much particular information as to the mode of aſſeſſing the farmers Property-tax in England; but that he had learned generally, that in the counties of Surry, Bedford, Huntingdon, Cambridge, Norfolk, and Eſſex, the farmers' Property-tax, with few exceptions, was aſſeſſed according to the aſſeſſment for the poor's-rate,—an aſſeſſment always made on a valuation conſiderably below the real one.

'Mr Rutherfurd ſtated, that, in the county of Kent, no attempt had been made to revalue any farm, the leaſe whereof was more than of ſeven years ſtanding; and that it ſeemed generally underſtood in England, that there was nothing compulſatory on the Commiſſioners to revalue farms after the firſt ſeven years of the leaſe.

'It was then propoſed to appoint a Committee to confer with the Chancellor of the Exchequer on the two following points.

'1. To get rid of the revaluation.

'2. To get the rate on the farmers reduced from 50 to 30 *per cent.* on their rents.

'Mr Solicitor-General Boyle, Mr Adam, and Mr Rutherfurd, were appointed a Committee for this purpoſe, and were requeſted to have a meeting called again as ſoon as they ſhall have ſeen the Chancellor of the Exchequer, and report the reſult of their conference with him.'

Upon looking over the above remarks, we find that a part of our correſpondent's ſtatement has been overlooked; therefore, one or two words more are neceſſary. He notices the deduction of one ſhilling in the pound, where the preſumed profit is below 150l. *per annum*, which deduction is certainly warranted by the act, though hitherto of ſmall advantage to the tenantry of Scotland. The reaſons why it has been of ſmall advantage are theſe: 1. In the arable diſtricts, the general rent of farms exceeds 300l., conſequently the occupier is not entitled to receive any deduction: 2. In every caſe within our knowledge, the full *maximum* duty of 10 *per cent.* has been aſſeſſed and levied, no matter what was the ſize of the farm, or how ſmall the amount of rent, unleſs the occupier had in the firſt inſtance intimated to the aſſeſſor, that he was not poſſeſſed of income from other ſources. This might be legal enough; but certainly was neither fair nor juſt conduct, when applied to the gains and profits of a claſs, nine tenths of whom had not an opportunity of ſeeing the act, conſequently were unacquainted with the nature of its enactments.

We have already conſidered one half of rackrent as a ſum which

which greatly exceeds the amount of profits from cultivating land in Scotland; but are unable to ſpeak with the like preciſion, whether three fourths of rent in England deſerves to be characterized in the ſame terms. In one thing, however, we are clear, namely, that the half of profits in the one country is a much higher criterion than three fourths is in the other. Reaſons which ſupport this opinion are already urged; and we have only to add, that the amount of poor's-rates in many pariſhes, more than compenſate the difference between the two criterions adopted, independent of the ſtreſs which might be laid on the cuſtomary clauſe in Engliſh leaſes, wherein the occupier is taken bound to pay all parliamentary and parochial taxes already impoſed, or to be impoſed. In a word, though aſſeſſments may be as unequal in England as in Scotland, when applied to the caſes of individuals, it is impoſſible that the evil of a fixed criterion can be felt with the like ſeverity in both countries. The ſyſtem of connexion in each, betwixt proprietors and occupiers, is formed upon ſuch oppoſite principles, while political cuſtoms and regulations are ſo vaſtly diſcordant, that the like hardſhips cannot be ſuſtained by occupiers of land in England, when the Property-tax is aſſeſſed on them according to a hypothetical rule; as has been grievouſly felt, and loudly complained of, by their brethren in this northern part of the iſland.

Before concluding, we have to notice, that the paper which follows will ſhow the impropriety and impolicy of the Property-tax act in a very ſtriking manner. Indeed, it will be found to be a pear of a different tree than the one we have been examining, and cannot fail to have great weight with every unprejudiced perſon, whoſe mind is open to conviction, and capable of comprehending the injury which agriculture, and thoſe concerned in carrying it on, muſt receive from a continuance of the preſent mode of aſſeſſing the income of farmers to the Property-tax.

N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Thoughts concerning the Property-Tax, and on a New Plan for aſſeſſing Income.

SIR,

THE immenſe wealth beſtowed upon the inhabitants of this iſland, is certainly the means by which we are, at this time, enabled to ſupport thoſe armies and navies that are neceſſary for our defence; and it ſeems obvious, that the neceſſary expenſe of theſe armies and navies, ought to be defrayed by every individual member

member of the state, in proportion to the quantity of wealth which each of them respectively enjoy; or, in other words, in proportion to their respective annual incomes, arising from that portion of wealth.

This being the only just rule, by which the different orders of men in the state can be equally assessed for the support of government, and the general defence of the nation; it is plain that it cannot be applied, until the amount of each man's annual income is pretty correctly ascertained. It is from the want of this knowledge, and the consequent inequality in the rate of assessment among individuals living in the same neighbourhood, and in nearly the same situation with respect to their rank in the society, that all the attempts hitherto made to establish such a rule of taxation, have failed to give satisfaction.

The proper means of obtaining this important information, being therefore obviously necessary for the establishment of an equitable rule of taxation, I trust it will not be deemed impertinent in an obscure individual, to presume to submit his thoughts upon the subject, to the serious consideration of the public at large.

In the first *income act*, the different orders of men were required to give in a state of their annual income, from whatever sources it might arise, to the surveyor appointed for the district, and to verify the same by their oath before the commissioners, if required. This mode of ascertaining the annual income of the different orders of men in the society, opened a wide door for fraud and evasion, and held out a strong temptation to commit perjury; and the consequence was, that honest men gave in a fair state of their income, and paid the tax imposed upon them by the act, to the utmost extent; while unprincipled men, in the possession of much larger incomes, often paid a mere trifle, and, in very many cases, nothing at all.

After this income act had existed for several years, another act was passed, for the purpose of obtaining the same kind of revenue from the different orders of men in the state, under the title of *a property tax*. But, although the name was changed, the tax still continued, and must continue, to be levied upon each man's annual income, and not upon the amount of the permanent property which he possesses. But the language in which the will of the legislature was expressed in this *property act*, was so obscure and mysterious, in some places so contradictory, that it was altogether incomprehensible to those who were required to obey it. I have put the question to a great number of men in various situations in life, and even to many of our lawyers and legislators; but I have never

never yet met with a single person who even pretended to understand this law. In fact there is good cause to believe, that the person employed by the Minister to draw up the act, did not understand it himself. The difficulties which naturally occurred to the Commissioners appointed to carry the act into execution, from the obscurity of language in which it was expressed, were quickly removed in Scotland, by the ingenuity of a private individual belonging to the tax-office in Edinburgh; who took upon himself, probably with the knowledge and concurrence of the Crown lawyers, to publish what he termed an explanation of the act, together with directions to the Commissioners for carrying the same into execution. The Commissioners having adopted this explanation, proceeded without hesitation according to the rules therein prescribed; and, in this way, the mere opinion of a private individual was imposed upon the inhabitants of Scotland as law, and the very foundation of the constitution of our Government was thereby subverted. For it is, and must be, universally acknowledged as an unquestionable truth, that there is no other power in this kingdom, competent to make laws for the Government of the realm, or to explain, alter, amend, or repeal any law which has been enacted, but the King, Lords, and Commons in Parliament assembled. It seems highly probable, and we have indeed the best reason to believe, that some private individual assumed the same legislative power in England, by giving a similar explanation.

The language in which the act 1806 is expressed, renders it nearly as incomprehensible as the former one. But the evils which have arisen from the measure, have greatly increased. The Commissioners, by undertaking to execute a law not clearly understood by any one of them, have put it in the power of every surveyor to become a legislator. It is now of little consequence for a tenant to give in to the surveyor, a state of the rent which he pays to his landlord, or of the income arising from the possession of a farm. The surveyor regards none of these things. He assumes to himself the power of putting an ideal rent of his own upon every farm which has been possessed for seven years, equal to what he supposes it would let for in the public market: and, according to this arbitrary ideal rent, he states his assessment upon the tenant, without knowing, without regarding, whether the tenant can have any income from the farm at that rent or not. It is not easy to obtain redress from the Commissioners for this kind of extortion: all the satisfaction which farmers generally get is, to be told by the surveyor, if they are not satisfied with the rent which he has put upon the farm, they may give it up, and he will find another tenant.

In the several laws enacted for the purpose of obtaining an annual revenue for the defence of the kingdom, in proportion to the annual income of individuals, a rule is prescribed for assessing income arising from land, both upon the landlord and tenant, which it seems impossible for either the one or the other to evade; because the landlord is bound to deliver to the surveyor, or to the clerk of the Commissioners, a correct statement of the rents which he is entitled to receive from each of his tenants; and, by this general rule, the tenant is appointed to be assessed for one-half of the rent paid by him to his landlord, which proportion of the rent is assumed by the framers of the act, as the tenant's income, arising from the possession of the farm. This general rule, in so far as it affects the landlord, is certainly just and equitable; because the annual rents which he receives from his tenants for the use of his land, after deducting the public burdens to which these lands are liable, is clearly the real annual income which he derives from his land. But with respect to the tenantry in general throughout the kingdom, and particularly in Scotland, the general rule for assessing that class of men is most unequitable; and, if persisted in, will become absolutely ruinous to many individuals. If it was known to be true, that all the farms in the kingdom are at this time equally rented, in proportion to their extent, and the quality of the land, some specific proportion of the rent paid to the landlord might be assumed as a general rule for assessing farmers, somewhat nearly in proportion to their respective annual incomes. But it is most unquestionably true, that this is very far from being the present state of the country; and that no proportion of the rent which may be named, can be assumed as a general rule for assessing the income of this class of men.

There exists, at present, in Scotland, two causes, which have had the effect, for some years past, to render rents in that part of the kingdom, and consequently the tenants' income, arising from the possession of land, most astonishingly unequal.

About thirty or thirty-five years ago, a general spirit for the improvement of land began amongst the tenantry in Scotland; and, since that period, the improvement of that part of the kingdom, and consequently the quantity of its annual produce, has increased in a most wonderful manner. In consequence of this general spirit of improvement, tenants, in the possession of extensive tracts of ground near the beginning of that period, upon long leases, and who had a capital to enable them to carry on improvements, were enabled to realize large sums of money during the continuance of these leases. The effect of these improvements was an increase of rent to the landlord at the commencement of every succeeding lease. As the improvement of land must always

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be gradual and progreſſive, this increaſe of rent, if things had been allowed to go on in their natural courſe, would have continued to be gradual and progreſſive alſo, and almoſt in exact proportion to the improvement of the ſoil. But this natural order of things was ſoon deranged, by a very iniquitous practice introduced into the country about the beginning of the period alluded to.

Fifty years ago, the great landed proprietors in Scotland were almoſt univerſally in the practice of doing all the buſineſs of their eſtates themſelves, with the aſſiſtance of a land-ſteward or factor, who reſided upon it. Theſe old proprietors were generally perſonally acquainted with every tenant upon their eſtate. They believed it to be their duty to watch over the conduct and behaviour of their tenants, and to beſtow rewards, or inflict puniſhments upon them, according to the propriety or impropriety of their conduct; but many of the ſucceſſors of theſe old proprietors having ſuffered their minds to be corrupted, in that whirlpool of faſhion and folly which wealth and luxury had introduced, and perhaps altogether unacquainted with buſineſs, the management of an eſtate naturally appeared an irkſome and oppreſſive burthen, which they were deſirous to be relieved from, ſo as they might enjoy their wonted pleaſures and amuſements without interruption. Perſons in this unpleaſant ſituation, did not need to ſeek far to find one of thoſe learned gentlemen belonging to the Court of Seſſion, called *clerks*, or *writers, to the ſignet*, who would readily engage to relieve them of every burthen attending the management of an eſtate. The faſhion of employing theſe learned gentlemen as the managers of eſtates, ſeems to have ſpread very rapidly; for there is perhaps not a ſingle nobleman's eſtate in Scotland, which is not at this time under their direction. But theſe learned gentlemen being generally unacquainted with country buſineſs, and, of courſe, with the reciprocal duties which landlord and tenant owe to each other, there is no wonder that they ſhould be found to err exceedingly in the management of eſtates put under their care. Conceiving it to be their duty to get the higheſt rent from tenants which can poſſibly be obtained, and being themſelves totally ignorant of the real value of the different farms under their management, they were induced, from this ignorance, and to ſave themſelves ſome trouble, to adviſe their employer to bring his farms into the public market, and ſet them to the higheſt bidder.

This method of ſetting farms, which was ſeldom if ever practiſed in Scotland forty years ago, has ſpread ſo rapidly under the management of theſe learned gentlemen, that there is, at this time, very few eſtates in Scotland into which they have not

introduced it. In this way, by letting farms to the higheſt bidder, a great difference has occurred between the annual income of theſe tenants, who are under this kind of management, and thoſe who are not; and this difference has been always increaſing, in proportion as the competition for the farms which came into the market increaſed.

The evil practice of bringing farms, like any other mercantile commodity, into the public market, opened a wide field for ſpeculation to men who had obtained any conſiderable portion of wealth in the farming buſineſs; and extenſive ſchemes of monopoly were, in conſequence, immediately formed by many of theſe men. It is obvious, alſo, that this monopolizing ſyſtem ſerved to increaſe the number of candidates; becauſe, though thereby diſpoſſeſſed of farms, having been bred to farming buſineſs only, they were unable to procure ſubſiſtence for themſelves and families in any other line. The number of candidates for every ſucceeding farm which came into the market, has, in conſequence of this monopoly, been continually increaſing; and this increaſing competition among farmers to obtain the poſſeſſion of a farm, has, within theſe four or five years paſt, enabled landlords to obtain from their tenants the promiſe, at leaſt, of greater rents than it is poſſible for them, in the preſent ſituation of the country, to pay out of the produce of their farms; and it is a well known fact, that many tenants in the ſouth of Scotland who took leaſes of farms three or four years ago, are at this time paying to their landlords from 100*l.* to 300*l.* a year out of their own pockets, more than they draw from the produce of the whole farm; beſides the expenſes of management, and the intereſt which they ought to receive upon the capital which they have inveſted in the farm.

From theſe things it is evident, that tenants reduced to this deplorable ſituation, by ſuch a diabolical method of letting farms, can have no income whatever ariſing from the poſſeſſion of them; and conſequently, to aſſeſs ſuch tenants in proportion to the one half of the extravagant rent promiſed to their landlords, is moſt unreaſonable and oppreſſive.

But there is another cauſe which ſtill remains to be mentioned, that has occaſioned, at this time, a very great diverſity in the incomes of tenants in Scotland, ariſing from the poſſeſſion of farms. It has been already obſerved, that great ſpeculations upon the improvement of land, have been entered into by intelligent farmers in Scotland, within theſe thirty years paſt. The great object of theſe ſpeculators was, to obtain the poſſeſſion of a farm, which appeared capable of improvement, and was, at the time, in an unimproved ſtate. For a farm of this deſcription,

scription, these men did not scruple to offer the landlord a greater rent than the old tenants conceived themselves able to pay, and even considerably more than the whole produce of the farm, in the situation in which it then was, could possibly afford to pay; depending upon the increased quantity of produce which they expected to obtain by their improvements when completed, to indemnify them, not only for this dead rent, which they paid to the landlord above what the land produced at the beginning of the lease, but also for the money which they proposed to lay out in the beginning of the lease for these improvements. These improving leases are seldom undertaken for a shorter period than twenty-one years.

A person who entered to a farm of this description twelve or fourteen years ago, who got all his expensive improvements completed, and the farm, by that means, brought into a full productive state, within the first eight or ten years of the lease, may be expected, at this time, to be drawing a very considerable revenue from it; and his annual income may be reasonably supposed to be much more than the one half, and perhaps considerably more than the whole rent which he pays to his landlord. In this case, therefore, the rule given in the Property-tax act, for assessing at one half of the rent paid to the landlord, is evidently too low. But, on the other hand, a person who only entered to a farm of this description two or three years ago, who has not yet got his farm brought into that productive state which will even enable him to pay his rent to the landlord, and who is, besides, expending even more than the rent annually out of his own pocket, for the purpose of completing the improvements upon his farm, cannot, at this time, and in the present situation of the farm, have any income at all arising from it; and, of consequence, the rule prescribed in the act for the assessment of tenants, when applied to this man, must be considered as unjust and inapplicable; nay, further, as calculated to obstruct the general improvement of the country, and, of course, the landlord's future prospects of increasing his revenue by these improvements. In this case, as well as in the one first mentioned, the landlord, so long as the farm remains in this situation, receives from his tenant the whole produce of it in name of rent; and, being assessed for that sum as his income, plainly pays all the tax both for himself and his tenant, which, in this situation of the farm, can be reasonably demanded from them under the name of Income tax.

Having shown that the present mode of assessing tenants, particularly in Scotland, on account of their income, is exceedingly unequal, and, in many cases, exceedingly oppressive; and that no proportion of the rent which can be named, can be assumed

with propriety as a general rule for assessing this class of men; and as there is too much reason to believe that this tax, as presently exacted from some other classes of men, is liable to the same objections; I shall, with your permission, proceed to submit a few thoughts concerning the best way of ascertaining the income of individuals, to the consideration of the public at large; and more particularly to the serious consideration of the different members of our legislative assemblies.

That it is altogether impossible for any two, or three, or even a dozen of men, acting as assessors under the act, in any county, to obtain a knowledge of the annual income of every individual person living within that county, will be generally admitted. It will, I presume, be also admitted, that assessors have at present no distinct rule prescribed to them for the assessment of individuals residing within their districts, in any case, that of landed proprietors excepted, where they are not pleased to admit of the return of income made by the different individuals; and that, in numerous instances, they are in the constant habit of making assessments according to their own will and pleasure. These assessors, therefore, in the exercise of this pretended power, have assumed to themselves an *arbitrary dominion over his Majesty's subjects*, which they ought not to possess, and which ought to be taken from them by a law containing more specific enactments.

The particular amount of any man's annual income, if he does not choose to give it himself, can only be ascertained by that local knowledge which his neighbours generally possess, of his situation and circumstances. If the plan which I have to propose shall be found adequate to the attainment of this important object, the great cause which has hitherto prevented a tax upon income from being generally acceptable to the whole kingdom, will be removed; and a foundation laid for the gradual consolidation of all the other revenue laws, into this simple tax: by which means, the public will be gradually relieved from that vexation and trouble, and from all those unnatural restraints which are the sure consequences of an immense number of revenue laws. The nation will also be gradually relieved from that enormous annual expense which it is at present subjected to, for the collection of these revenues.

As the particular amount of each man's income can only be obtained by that local knowledge which mankind generally have of their neighbours' situation and circumstances, the plan which ought to be adopted for obtaining this information, is, by the appointment of a proper number of qualified men in every district, to sit as a jury upon their neighbours, and deliver

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their verdict upon oath, like any other jury, with respect to the particular income of each of their neighbours in that district. It cannot be supposed that the amount of each man's income can be precisely ascertained by this means; but it may certainly be ascertained as nearly as is necessary for the purpose of taxation, and much more correctly than it can possibly be in any other way. For example, in those districts where the annual income of the inhabitants arises almost entirely from the produce of land, a jury composed of intelligent farmers, who had a particular statement of the rents paid by each tenant to their respective landlords lying before them, would not find much difficulty in determining, with a sufficient degree of precision, the amount of each man's income arising from the occupation of a farm, after deducting the landlord's rent, and expenses of management.

In mercantile and manufacturing towns, merchants, manufacturers and tradesmen, have as perfect a local knowledge of the circumstances and situation of their neighbours, who are carrying on business in the same line with themselves, as farmers have of their neighbours' situation; and would be thereby enabled to ascertain their respective annual incomes also with a sufficient degree of accuracy for the purposes of taxation.

I would therefore propose, that each county in the kingdom should be divided by the Justices of the Peace within that county, into as many different districts, or subdivisions, as they may deem to be most proper, in the same manner as the different counties in Scotland were divided, for the purposes of executing the Small-debt act. I would also propose, that the Justices residing in each of these districts should be required, upon a certain day annually, to make up a roll of the names of all the inhabitants in that district thought to be properly qualified to sit in a jury, for the purpose of assessing their neighbours, their own names being also included; and deliver the same into the hands of the clerk of the peace for that district; that a jury should be chosen annually, by ballot, out of this roll in the clerk's hands; and that these men should be bound to take an oath, to be administered by the clerk, *that they will give in a faithful and true report to the Justices, to the best of their knowledge and belief, of the particular income of each individual person within their district, that comes under the description of those who are liable to be assessed under the Income-act.*

In large mercantile and manufacturing towns, where the merchants, manufacturers and tradesmen are numerous, it may be proper to chuse a separate jury from each of these three classes of men, for assessing that particular class of men who belong to these professions respectively.

If all the present revenue laws were repealed, and all taxes consolidated in the Income-tax; the common labourer and mechanic, being thereby enabled to purchase all the necessaries of life which are at present loaded with excise and customhouse duties, at perhaps a good deal less than one half of their present price, should in that case be charged with some moderate assessment in lieu of these duties, as an Income-tax. But, until these excise and customhouse laws are repealed, the lowest rate of taxable income ought perhaps to continue the same, or nearly the same as it now is.

It would be neceſſary to inſtruct the clerk of the peace in each diſtrict, to publiſh an advertiſement at all the church-doors within his diſtrict, or otherwiſe to cauſe a requiſition to be delivered by a conſtable to every perſon who may be deemed liable in the payment of Income-tax, requiring them, under a certain penalty, to deliver in to him, between and a certain day therein named, a ſtate of their groſs income for the year preceding, from whatever ſource it may have ariſen; the intereſt of money excepted; it being unneceſſary to ſtate this ſource of income, as the perſon who has borrowed the money, not being allowed any deduction from his income on that account, will no doubt take care to retain the tax upon the intereſt which he pays. In theſe returns, a particular ſtatement ſhould be made of the parochial and other taxes, and of all other expenſes which the law may authoriſe them to claim as deductions from their groſs income. And farmers and manufacturers ſhould alſo be required to ſtate, in theſe returns of the groſs amount of their income, the particular ſums which they may have expended upon each of the different improvements they may have made upon their farms or manufactures, in the erection of buildings or machinery for carrying on their buſineſs within that period, which they may propoſe to claim as a deduction from their groſs income for that year.

After the time appointed for giving in theſe returns to the clerk is elapſed, the magiſtrates of the diſtrict ſhould appoint him to iſſue ſummonſes to all thoſe whoſe names are contained in the roll in his hand, requiring them, under a certain penalty, to appear upon ſuch a day, and at ſuch a place as ſhall be therein named, for the purpoſe of being ballotted to ſerve upon the Jury. After the particular perſons who are to ſit as Jurymen for that year have been determined by ballot, and in the event that none of the juſtices ſhall have been ballotted to ſerve upon the Jury, one of their number ſhould be appointed by themſelves to preſide in the meeting, to direct the mode of procedure, to collect the votes, and keep order in the court. But this preſiding Juſtice, if he is not alſo a Juryman, ought not to be permitted to give any vote or opinion in any queſtion that may come before this Jury.

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When the Jury has been ſworn in by the clerk, and have elected their chancellor or foreman, the returns made ſhould be laid before them; and they ſhould then proceed to conſider the ſame, and determine, by a majority of votes, the particular amount of each man's taxable income, and arrange them into their reſpective claſſes, according to the rule preſcribed by the act of Parliament; beginning with the loweſt taxable income; which ſhould be termed *Class First.*

Having gone through the whole in this way, and determined the particular amount of income for which each individual ought to be aſſeſſed, a roll ſhould be made out by the clerk, containing the names of all the perſons within the diſtrict which have been found liable to pay a tax upon their income, arranged under their reſpective claſſes, with the amount of the income for which this Jury have found each of them liable to be aſſeſſed. This roll, after each page of it has been ſigned by the chancellor and preſiding magiſtrate, and certified by the clerk, ſhould be tranſmitted by him to the general clerk of the peace for the county: and, ſo ſoon as all the returns from the different ſubdiviſions of the county have been received, the general clerk ſhould be directed to make up an abſtract of the whole, ſpecifying the number of names that are contained in each claſs in the whole county, and alſo the amount of the income for which each of theſe claſſes are liable to be aſſeſſed; and tranſmit this abſtract of the amount of the income for which the whole county is liable to be aſſeſſed, to the Secretary of State. When the Secretary has received returns from all the different counties in the kingdom, he ſhould then cauſe a general abſtract to be made up of the whole, ſpecifying the names of perſons contained in each claſs, and the amount of the income for which each of theſe claſſes are liable to be taxed.

When the Chancellor of the Exchequer, or Prime Miniſter for the time, comes to determine upon the ſums that it will be neceſſary for him to raiſe for the ſervice of the year, he will ſee in a few minutes, from the general abſtract in the hands of the Secretary of State, what rate per cent. upon the amount of the income of each of the different claſſes, will produce that ſum; and he has then only to go to Parliament and obtain its authority to levy that tax upon each man's income throughout the kingdom. The exact ſum propoſed to be raiſed, will be thereby obtained, without either increaſe or deduction.

As the clerks of the peace for the different ſubdiviſions in each county, will, by this plan, be ſubſtituted in place of the preſent aſſeſſors for theſe counties, and as they will be alſo the moſt proper perſons that can be employed as ſurveyors of aſſeſſed taxes in their reſpective ſubdiviſions, the ſalaries preſently allowed to theſe

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aſſeſſors in each county ſhould be divided amongſt them, in proportion to the extent of their reſpective ſubdiviſions: and it ſeems to be alſo reaſonable, that they ſhould have likewiſe ſome additional remuneration for their trouble as clerks of the peace.

I ſhall not at preſent enter into the conſideration of the evils which the other revenue laws have brought upon the ſociety; the reſtraint which they have impoſed upon the natural liberty of the ſubject; the obſtructions which they oppoſe to the general improvement of the country; the trouble and vexation which they occaſion; and the direct tendency which they have to corrupt the morals of the people. Neither ſhall I at this time enter into the conſideration of the very great pecuniary advantages which the nation would obtain by conſolidating the duties impoſed by all theſe different revenue laws, in this ſimple tax upon income. Theſe things may probably be noticed afterwards.

There is little reaſon to doubt, that the plan now propoſed will not be very acceptable to thoſe gentlemen who are employed in the different revenue offices, becauſe it has a direct tendency to injure their pecuniary intereſts. On the contrary, it is highly probable that many learned arguments, and much ſophiſtical reaſoning may be employed to convince the public that it ought not to be adopted. Very likely, the plan will alſo be unacceptable to thoſe covetous men, who have, under the old ſyſtem, found an opportunity of evading the payment of their due proportion of taxes. But all thoſe who have found themſelves oppreſſed under the old ſyſtem, and all thoſe who are unbiaſſed by any pecuniary or ſelfiſh motive, and wiſh to ſee the ſupplies neceſſary for the ſupport of Government, and the general defence of the kingdom, fairly and equally proportioned upon all his Majeſty's ſubjects, in proportion to their reſpective annual income, may perhaps be of a very different opinion. And, ſeeing that every other plan which has hitherto been adopted for an equal diſtribution of the Income or Property-tax, has failed to produce the deſired effect, theſe people may perhaps be diſpoſed to think that one which promiſes ſo fairly to accompliſh this deſirable object, ought to have a trial.

I think it may be ſafely averred, that the execution of the Income act, according to the plan propoſed, will not be attended with nearly ſo much trouble to any county in the kingdom, as the execution of the militia laws do now occaſion. It may certainly be expected, that very many men will, at firſt, feel great reluctance to give judgment upon their neighbours' circumſtances; but a year or two will overcome this reluctance. Reaſonable, thinking, honeſt men, who perceive the advantages which the nation will obtain by the eſtabliſhment of a fair and equal mode of taxation, will engage in it with alacrity; and ſo will all

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thoſe who have felt themſelves oppreſſed by the old ſyſtem, or who have ſeen neighbours perhaps in a higher ſituation than themſelves with reſpect to income, evading, in a great meaſure, the payment of a tax to which they themſelves are ſubjected. And although ſome conſiderable errors may be committed in the firſt outſet of the buſineſs,—if the plan is a good one (and I am ſure it is formed upon the true plan of nature) it will be continually improving, and grow every year more and more towards perfection. I am yours, &c.

A Lover of Truth, and a Friend to the State.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Diſeaſes of Wheat, &c.

Sir,

The unfavourable idea entertained by Sir John Sinclair, in the reſult of his inquiries reſpecting the cauſes of mildew and other diſeaſes in wheat, in ſo far as the ſame are attributed to the heavy manuring, and full ſeeding, of the ground, occaſions me to trouble you with this letter. At ſame time, I embrace the opportunity of correcting a few miſtakes in my letter to Sir John Sinclair, given in laſt Number of your Magazine as an extract from the above inquiries; ſome ſentences of which are totally unintelligible, whilſt others expreſs ſentiments quite different from thoſe I intended to communicate.

I ſhall, in the firſt place, notice theſe miſtakes. In p. 71. of Sir John's Inquiry, it is ſaid,—'Some were of opinion, that the dry weather before the commencement of the rains had made the crop ripen before the grain was filled; and indeed, the inferior quality of what was firſt cut from early parts of fields, where there was no want of moiſture, was found rather worſe than better.' The latter part of the ſentence ſhould have been,—'*Indeed, the inferior quality of what was firſt cut from early parts of fields afforded cauſe for the conjecture; but afterwards, when cutting where there had been no want of moiſture, it was found to be rather worſe than better.*' In ſame page, it is ſaid,—'but ſeldom if ever leaving viſible and ſatisfactory marks of the means by which the injury was effected, either the tender ſhoots to be all over as if they had ſprouted;' whereas it ſhould have been,—'*But ſeldom or never without leaving viſible and ſatisfactory marks of the means by which the injury was effected, either the tender ſhoots appear to have been cut over as they ſprouted.*' *Could*, in another inſtance, has been put for *ſhould*; as has *obſcurity* for *obſcurely*.

In the next place, I muſt offer one or two remarks on what is ſtated in the inquiries alluded to reſpecting manure and ſeed

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work, heavy manuring and full feeding being by Sir John conſidered as two of the cauſes of mildew. Perhaps doctrines more baneful to the intereſt of agriculture cannot be promulgated, than thoſe delivered by the worthy Baronet, when treating upon the two points under conſideration. It may juſtly be conſidered as a truism, that he who ſows ſparingly, will reap ſparingly; and whatever ideas may be entertained, in theory, reſpecting muck, it has, in practice, been invariably found the great deſideratum for rendering fields permanently fertile. Lime, marl, ſhelly ſand, and all calcareous ſubſtances, have powerful effects on their firſt application; but when repeated, unleſs accompanied with vegetable manure, prove but feeble enrichers of exhauſted ground; and accordingly, it is an object of the firſt importance with every practical farmer, to increaſe the quantity, and improve the quality of this moſt valuable article, as much as poſſible. As every eſſential good may be perverted to a bad purpoſe, there is no doubt, that exceſs in dung or ſeed has at times proved hurtful; but where one acre ſuffers from getting too much of either, an hundred acres ſuffer from receiving too little. It muſt be obvious to every attentive obſerver, that, were the manure, labour, and ſeed, which, in a large proportion of the country, are ſtretched over too great a breadth of ground, confined to two thirds, and, in many places, to one half, of the extent, the fields would be much more productive than they are; and it is owing to the over frugal manner in which manures of all ſorts are generally adminiſtered, that ſo many weak crops, or rather effigies of crops, appear, and lands revert ſo rapidly to their former unproductive ſtate.

As the diſorder which befel the wheat crop of laſt ſeaſon was uncommonly ſtriking and ſevere, it is no wonder that the feelings of true patriotiſm were rouſed, and every poſſible method tried to inveſtigate the cauſe of the evil, and to find out an antidote againſt its malignant attacks in future. In ſuch caſes, however, great caution is always requiſite, leſt, by endeavouring to avoid one evil, we fall into a greater. Thin, light crops are, without doubt, leſs liable to ſuffer by heavy rains and moiſt cloudy weather than weightier ones: but would it, on this account, be adviſeable to regulate our cultivation by ſuch a ſtandard? Certainly not; at any rate, ſo far as my obſervation went, the thin light crops of laſt ſeaſon did not eſcape more than the heavier ones. The diminutive heads on weak ſtalks, as well as the larger ones on ſtronger ſtalks, in parts of fields where the crop was thinner, were no better filled than where the crop was cloſe and weighty; a ſtriking inſtance of which occurred in one of my fields, of about fourteen acres, where, from variety of ſoils, and different preparations, both deſcriptions were conſpicuous. Eleven acres were ſown on the 16th and

17th

17th October, after potatoes and drilled beans; and three acres on the 22d and 23d February following, after turnips. Eight bushels of a particularly small variety of London seed was sown on about 2½ acres of the potatoe ground, and also seven bushels of Kentish seed on potatoe ground adjoining that sown with wheat from London; the remainder of the ground being seeded with Kentish wheat once sown in this country. The plants from the London seed braired equally, and, as soon as they appeared above ground, fully satisfied me, that, through inattention of my servant, too much seed had been given. The crop, being obviously too thick, and screened on the west by a low hedgerow of trees, was lodged soon after shooting; and, as the head was short, small and soft, even when cut, I laid my account with a poor return, and gave up all thoughts of trying the produce as seed for next season. It was, however, carefully kept by itself, and thrashed out in February, when, to my astonishment, there were twenty-six bolls two firlots of marketable grain, and six firlots of inferior quality. The produce being so much above expectation, I was induced to sow a boll of it after turnips, as a further trial next season. The seven bushels that came from Kent being sown of a proper thickness, yielded stronger stems, and lodged less, than the former; but, though apparently a better crop, did not return so much by two bolls per acre; and as for the produce of the rest of the field, it came 3½ bolls short per acre, whether after potatoes or beans; that after beans being more soft and shrivelled than what was after potatoes, though it had the advantage of the deepest soil, which had been equally well dunged as the other parts in the preceding year. Indeed, the most gravelly, and thin parts of the soil, in every field which I inspected, uniformly produced the hardest head, and best filled grain; and is a strong proof of the little effect the drought had in promoting the malady, as well as of the little relief to be obtained by thin sowing, or withholding manure. In my field, the produce after turnips was better in quality, though less in quantity, than after potatoes, but fully more than after drilled beans.

The singular phenomenon of whole fields in particular districts being instantaneously deprived of vegetation, appears, from many circumstances, to have been occasioned by the electric fluid which the clouds at that period emitted in remarkable quantities; particularly when we reflect that no other means, hitherto experienced, was competent to that effect, except frost; and it is evident that frost could not have accomplished what took place, without manifest injury to, if not total destruction of, various other kinds of crops, especially potatoes, which, though liable to damage from even slight degrees of frost, escaped without the smallest blemish. As to the partial injury which the wheat crop

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in general experienced, it seems to have proceeded from an excess of unfavourable filling weather, as a continuation of easterly hazy fogs never fail to retard the filling process, at times partially to arrest conception and maturation, and to bring rust and a dusky hue on all plants not in vigorous growth, which afterwards become a prey to animals that take possession of them. Heavy showers have the same effect; and, even in moist cloudy weather, grain is never fully matured. These causes combined, continuing to operate for several weeks, as was the case last season, were surely fully sufficient to accomplish (excepting the mortal blow alluded to as proceeding from electricity) all that took place, without the aid of fungi, maggots, &c.; which seemingly were consequences, rather than causes of disease. Neither does it appear that much could be ascribed to the effects of putrid effluvia arising from the ground. However ingenious this theory may be, it is not quite consonant with the sound orthodox doctrines usually noted in the Farmer's Magazine. The probability rather is, that the meliorated state of the soil, from being moistened after a long period of warm weather, had yielded an excess of nutriment in a degree somewhat similar to what prevents the filling of grain growing on dunghills, or the sites of dunghills, as well as the rank tufts often seen in fields, neither of which ever fill perfectly. In all these cases, the impediment is obviously owing to excess of nourishment, as the grain is always better or worse filled, in proportion to the degree of luxuriance that appears. Besides, did the failure in these instances originate from pestilential vapour, how could the surrounding corns escape? And if the smoke that arises from the ground, when warmed and moistened, was possessed of deleterious powers, what would be the fate of tender braird in the months of May and June, when more of that vapour appears than at any other season of the year? Even the blotches, rust and fungi seen on exuberant foliage, seem as likely to be formed by the action of the atmosphere upon the exudings and perspiration of plants, as is observable upon glass during a severe frost, as from any vegetative principle drawing existence from plants. In the case of last season, much of the mischief has been ascribed to drought, from the crop being thereby affected before the commencement of the rains. Nothing, however, came within my observation, nor has taken place since, which warrants such a conclusion; the grain on the driest parts of all fields in this neighbourhood having been better filled than those on deep earthy soils. Oats suffer sooner, and more, by heat, than any other grain; and yet we find those raised on the driest grounds meal best.

A great degree of luxuriancy is always unfavourable to the filling of grain; as superabundant nutriment, by too highly fostering the

the ſtems and foliage, not only poſtpones the ſtage of filling, but retards the proceſs of the ſap or mucilage in its converſion into grain. Few ſeaſons have been more favourable to vegetation than the months of May and June laſt. Crops of all kinds throve in an uncommon manner; and at the end of July, when the rains began to fall, the heated ground became ſo meliorated by the moiſture, as to yield nutriment in no ſmall degree detrimental to the maturation of grain. This circumſtance, and the long continuance of moiſt unfavourable weather afterwards, were abundantly ſufficient, without the aid of putridity, to effect all that came to paſs. Beſides, the uninjured ſtate of moſt other plants at that period, tends greatly to confirm this opinion; for, had this ſuppoſed putrid quality exiſted to any extent in the atmoſphere, other plants, as well as corns, would have felt its baneful effects.

It is worthy of notice, that exceſſive luxuriance ſeldom proves advantageous to the crop; and that it is often promoted by a friableneſs in the ſoil, or a volatile quality in the manure,—though neither of them, nor even both combined, are adequate to the production of weighty crops,—while other preparations operate reverſely. Theory has too much influence in forming ſyſtems; and habit frequently confirms theſe ſyſtems, without attending to their bearings and conſequences. The long partiality ſhown in favour of clover lea, as a preparatory ſtep for a wheat crop, and the antipathy entertained againſt potatoes as a cleaning crop, are proofs that farmers are too often miſled by improper ſyſtems and incorrect opinions. A wheat crop after clover, eſpecially if the clover was ſown with a crop for which the land had not been ſummer-fallowed, rarely ſucceeds; and if it does ſucceed, the benefit gained may juſtly be reckoned inferior to what might have been obtained from taking a crop of oats; whilſt the ſoil will, in the latter caſe, be in a much more ſuperior condition. With regard to potatoes, I am glad to remark, from the communications to Sir John Sinclair, that, it appears, juſter notions are now prevalent as to the utility of this crop than formerly. Wheat after potatoes is found leſs liable to diſeaſe than after fallow or beans, and equally productive. The experience of half a century, every year of which I have ſown wheat after potatoes, enables me to ſpeak with preciſion in favour of that mode of culture, having rarely, if ever, obſerved, that, in following it, imperfect grain was obtained, whilſt, in four inſtances out of five, the produce was greater than procured in any other way. The ſtraw of all grain which ſucceeds potatoes, eſpecially that of wheat, is always peculiarly clean, ſtiff and tough, ſtanding the mill much better than what is raiſed in any other method; hence it is plain, that wheat, after potatoes, continues in a healthy ſtate, when other wheats are diſeaſed and debilitated;

debilitated; and, of courſe, the culture of potatoes muſt be viewed as one of the beſt preparations for wheat with which we are acquainted.

I have long regreted, that from potatoes not keeping over one ſeaſon, the culture of that valuable root ſhould have been leſs followed than other crops; but I flatter myſelf, that now, when unfavourable prejudices againſt them are wearing away, their cultivation will be conſiderably extended, not only as a preparatory ſtep for wheat, but alſo as food for horſes and cattle. Alongſt with ruta baga, I hope that potatoes will ſoon be generally uſed for ſupporting farm ſtock during the winter and ſpring months, to the great benefit of the animals, and the advantage of their owners.

Before I finiſh, allow me to ſtate, that the bad crop of wheat, in 1799, cauſed the woolly-eared variety almoſt to be entirely given up; ſince which, the ſmooth-chaffed ſorts have been generally uſed. I have doubts on the propriety of the change, becauſe the woolly-eared kind had long been in vogue, and was conſidered to yield the greateſt produce. The following fact perhaps merits ſome attention. A ſeed-merchant, in 1807, ſent me ſeven buſhels of Engliſh wheat, which was ſown on part of a nine acre field that lay at a diſtance from my reſidence. This field had not been inſpected during the foggy and rainy weather at the cloſe of laſt ſummer; but, when viewed afterwards, the part ſown with Engliſh wheat, which turned out to be of the woolly-eared variety, diſtinguiſhed itſelf at half a mile's diſtance, by preſenting a dark duſky appearance, the chaff being much blackened; but, notwithſtanding theſe circumſtances, the crop, when thraſhed, yielded plumper grain, with leſs refuſe, than what was obtained from the reſt of the field; which, after all, might, in ſome reſpect, be owwing to the change of ſeed. I am, yours, &c.

Mid-Lothian, 1809. T. S. S.

REMARKS BY THE CONDUCTOR.

With much reſpect for our worthy friend Mr T. S. S., whoſe ſentiments on Agriculture rarely differ from thoſe uniformly maintained in this work, we are in duty bound to notice one or two paſſages in the above intereſting and valuable communication; thinking, that when making them, his wonted conſideration was aſleep, and, of courſe, that our good friend had neglected to eſtimate the bearings and conſequences of what he ſtated. In the firſt place, we muſt allude to his comments on what we lately urged reſpecting the cauſes of the calamity which affected the wheat crop of laſt ſeaſon. That unfortunate calamity we always viewed as produced by atmoſpherical influence; and, in particular, we conſidered putrid effluvia, or peſtilential vapour, as the chief, though not the

the only agent of the mischief so widely and extensively sustained. It must be confessed that we do not observe any thing advanced by Mr T. S. S. much calculated to produce a change of our sentiments. He, indeed, mentions another agent of mischief, namely, electrical fluid; and on this point we are at one with him, because the air, when filled with electrical fluid, is never in a healthy state: But when an excess of nutriment is assigned as a cause of failure, we feel an inclination to shake our head, and crave leave to remind our good friend, that the period was arrived when the growth of the parent plant had ceased, and that the young and tender grain needed only mild and kindly weather to maturate and bring it to perfection. Without reflecting upon these things, our good friend argues the point as if wheat plants were capable of growing for ever; else, why does he assign excess of food to the roots and fibres, as the cause of mortality to the grain, deposited in the cups of the ear; which is neither more nor less than saying, that the crop was killed by a surfeit. Again he supposes, if excessive heat, when succeeded by excessive moisture, produced pestilential vapour, that other grains could not have escaped. That other grains suffered, though not so severely as wheat, is well known. Our good friend also supposes, if vapour or effluvia possesses deleterious powers, that the young braird of grain would be cut off in May and June, when more of that vapour appears, than at any other period of the season. To this we answer, That vapour produced in May or June, cannot have the same effect with that produced in July or August, because the heat is not then so great; consequently, when succeeded by heavy rains, the atmosphere cannot possibly be so much contaminated. But without laying any stress on this point, it is maintained, that though the crop, when young, may not receive injury from putrid effluvia (perhaps, on the contrary, it is thereby much benefited), it will always in a greater or lesser degree sustain injury, if the atmosphere is filled with such vapour, when the grain is in an embryo state; and that the extent of the injury will be regulated by the age or strength of the young grain, and the length of time in which the atmosphere continues sickly and unhealthy. The truth of what is maintained, was fully confirmed by what happened last season to the wheat crop; every field in the eastern counties of Scotland, those on the sea-shore and upland districts excepted, having suffered in one respect or other, whilst fields on the shore, where the heat was moderated by sea-breezes, were very little affected. Even wheats in the uplands were fully as good as usual. Now, if electrical fluid and excess of nutriment occasioned the failure, unfortunately now too well ascertained, how comes it about that the influence of these causes

was not felt as decisively upon the sea-shore as in the internal districts? That they were not so decisively felt, is well known to every man who has attended public markets; and can only be accounted for, by a reference to the cause condescended upon in this and former papers. After all, as the disease which affected wheat last year was of an abstruse nature, it is highly probable that more agents than one were concerned; and this may be admitted, without impugning, in the slightest manner, the opinions given by us on the subject. N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Culture of Sea-Kail—and on the Stake-fishing in India.

SIR, *Forfarshire, 11th April*, 1809.

THE intimate connexion between the *Field* and the *Garden*, renders your Farmer's Magazine a proper channel for conveying to your numerous readers useful, and, I am sure, acceptable information, concerning Horticulture.

The following little piece of intelligence may be of use. The species of Colworts called *Sea-Kail*, is becoming a general article of cultivation in gardens all over the island; and no wonder. It is an agreeable substitute for asparagus, and sooner ripe for our tables, by a month or six weeks. If permitted to grow in the open air, it would be green and unfit for use. It requires being *blanched* like celery. The following account of the most proper culture may be beneficial to your readers.

The seed is to be sown in the month of April, in drills, on a good light dry soil: as the plants rise, thin them, and keep them clean. The first winter earth them up, to protect them from the frost; the following summer, thin them to about eighteen inches distance, leaving the best plants. At Christmas, take away the decayed leaves, and cover up each plant with a large deep pan, or flower-pot, upon which lay a quantity of the leaves of trees, to keep off the frost, and create heat to the plants. Litter or stable dung is sometimes used instead of leaves, but is apt to give the plants a rank taste. In the following month of April, the pots will be quite full of fine tender blanched shoots, which may be cut over by the ground (but not too near) and the stumps covered up again for a second crop. This may be repeated with the same plants two or three times during the spring, before the plants are left for summer's growth. With this treatment the Sea-Kail, if sufficiently boiled in *two waters*, will be found equal to any asparagus or brocoli, and may be eaten with butter, or butter and vinegar, and pepper, as may suit the taste. The plant being a perennial one, will last for any length of time with proper culture.

The

The above mode is the one at present successfully practised by his Majesty's gardener at Kensington.

Allow me now to furnish you with some information on another subject.

A gentleman long resident in the East Indies, and of established veracity, informs me, that the art of catching fish of all kinds by means of stake-nets, has been long known there, and practised more extensively than with us. At Surat, he says, he observed stake-nets set in the open sea, a league and further from land, and in thirteen or fourteen fathom water. The fishers, in the spring, provide stakes of the proper length, by joining teakwood trees to each other, and pointing them with iron, or hardening them by fire. The stakes are, at high water, let down to the bottom; a rope is laid over their upper end; the rope is fastened to two heavy loaded boats, one on each side of the stake; when the sea ebbs, the weight of the boats forces down the pointed stakes deep in the sand; nets are fastened between these stakes, and drawn up occasionally, with fish of every kind caught in them. Before the approach of the tempestuous season, the stakes are drawn up, and carried to land. They are pulled up by inverting the manner of fastening them; buoyant boats are fastened to them at low water, and as the tide rises, the boats rise also, and pull up the stakes. I see no reason to doubt of this method of fishing being as practicable in our seas as in the East Indies. We have many banks at sea shallower than fourteen fathom, and the shallower the better. Sandbanks are most frequented by fishes, probably on account of the worms bred in them. The high price of beef and mutton, has also raised the value, and increased the demand for fish; and offers great encouragement for trying new experiments to bring more to market. DOMESTICUS.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR, *Mid-Lothian, 8th May,* 1809.

I HEAR that a practice prevails in your county, which I believe is singular. Your mowsters, who cut hay, do it on day's-wages only, and will not work by the acre; while, at same time, you complain with your neighbours of a scarcity of hands. My best advice to make hands plenty, is to cut by the acre only; for, in that way, little more than one half the number will do what the whole do at present. This was long the only kind of country business ever done by the piece; now, it seems, to be almost the only thing done on day's-wages. I recollect, that one acre was a general task for a man per day, when taken by the acre; now about one half, when they work by the day. It is reported, too,

that in the parish where you reside, the labourers have been shortening the day to nine hours, while their wages were rising. This should be remedied, till we have security for their working as they do by the piece. Beware of hurtful innovation. I am, &c.

A FARMER.

NOTE.

WE believe that farmers resorted, in the first instance, to the plan of cutting hay by the day, in order to have the work well performed, which was not the case when done at a fixed price per acre. Now, as the difference betwixt good and bad cutting will do much more than compensate the additional expense of cutting by the day, we cannot recommend a resort to the antient practice.

If our correspondent means ploughmen, when he speaks of labourers having reduced their hours of labour, we must consider him to be in an error, as horses are wrought nine hours *in the field*, when the season will allow it; which, added to the time required for feeding, dressing, and cleaning the stables, &c. will make the day's work ten hours at least. If he means labourers hired by the day, perhaps he is not wide of the truth; but, when it is recollected, that people of this description generally reside in the neighbouring villages, and spend a good deal of time in coming to and going from their work, the number of hours may seem sufficient. If labourers would only employ themselves busily when at work, the hours of employment are not to be found fault with. N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On Improving Leases.

SIR,

I LAY it down as a maxim, whenever I see the proprietors of great estates advertising to let their lands on improving leases, that agriculture is in a thriving condition; and, if this maxim be a just one, the state of farming in Scotland has not, at any period, been more prosperous than at present. In the course of the last nine months, several of the largest estates in Scotland have been advertised to be let on improving leases; and in all of them encouragement has been held out to tenants of skill and capital, particularly from the South country. Among these are the following properties, viz.

1*st*, The great estate of Sutherland, belonging to the Marquis and Marchioness of Stafford, who appear to be very anxious for the improvement of their extensive and valuable property, and have promised encouragement to improving tenants. Upon this estate, there is at present carrying on a new road along the eastern

ern coast, being a continuation of the plan projected by Government for making roads in the Highlands of Scotland; and many thousand yards of dikes are proposed to be built, and of ditches to be casten, in the course of the ensuing summer. These improvements will, in the mean time, give bread to many industrious labourers, and will ultimately greatly benefit the property. The Marquis and Marchioness were upon the spot for several months last season, and gave directions about these improvements in person.

2dly, Another estate, lying at no great distance, is that of Coigach, on the western coast of Ross-shire, belonging to Edward Hay Mackenzie of Newhall, Esquire, on which he proposes to give what encouragement to good tenants can be wished for; being particularly desirous of introducing good farming and the proper management of sheep, into a district of the country where they have been hitherto little known.

3dly, The third instance is that of the estate of Brahan, in the same county of Ross, the property of Lord Seaforth, who advertises, that he is disposed to give every encouragement to improving tenants. The land to be let is said to be fit for turnips, and every sort of improved husbandry; and from Lord Seaforth's known character for public spirit, and his anxiety to meliorate his estate, there is little reason to apprehend but that the encouragement will be of the most liberal kind.

4thly, A fourth great estate is that of Lord Macdonald in the island of Skye, which is said to be, in different parts of it, equally calculated for tillage-farming and for grazing; and for the improvement of which, his Lordship offers liberal encouragement to good tenants. It is to be observed, that two great new roads are projected, and are proposed to be immediately carried forward through the island, where, it is believed, good roads have not been seen before; and it is now also fixed, that a new road leading from Inverness to the sea next to the island, is to be carried on in the course of the ensuing summer, which will facilitate the communication with the continent, and the whole of the neighbouring islands, in such a way as has not existed before.

5thly, Sir James Grant of Grant, Bart. has advertised his great estates of Urquhart and Abernethy, both in Inverness-shire, to be let on improving leases to substantial and industrious tenants; and has notified, that he is disposed to give every necessary amelioration to such: and, from the excellent character and well-known patriotism of Sir James Grant, no one will doubt the fulfilment of his promises. Sir James states, that he is to prescribe rules to his tenants for the management of their farms, which he

has got printed, and is to deliver along with their leases; and although this is a precaution that would not be either necessary or recommendatory with the farmers in East Lothian, Berwick, or Roxburghshires, yet it may be very proper and highly commendable in the present state of farming in Inverness-shire.

6*thly*, Another great estate to be let is that of Arisaig, lying in the western district of the same county of Inverness, belonging to Mr Macdonald of Clanronald, consisting of excellent grazings in the vicinity of the Caledonian Canal; and as those grazings are said to be particularly calculated for sheep-stock, there is every reason to conclude, that they will become an object to storemasters in that line of farming speculation.

7*thly*, The next estate I shall notice is that of Gordonston in Morayshire, the property of Sir William Gordon Cumming of Altyre and Gordonston, Bart., on which great encouragement is held out to tenants of capital, skill and enterprize; and the lands are proposed to be divided into such portions as may suit tenants of every description. This estate has been surveyed by Dr Coventry, Professor of Agriculture in the University of Edinburgh, and his opinion taken as to the most proper plan of laying it out; and every thing that is proper is to be expected from the opinion of so excellent a judge of land.

8*thly*, Another estate advertised to be let is that of Innercauld, belonging to the late Captain and Mrs Ross Farquharson of Innercauld, lying in the higher parts of the counties of Perth and Aberdeen. Mr Farquharson said, that he was to divide his estate into such farms as might be of a suitable size; and as the lands are chiefly calculated for sheep-pastures, he was disposed to give proper encouragement to stock-farmers from the South country. The building of comfortable houses, and such subdivision of dikes as may be necessary to render the farms commodious, is always understood to be included in what is said to be encouragement to tenants; and the managers on the estate, since Captain Ross Farquharson's death, say that they are to follow out his plans. It must be an encouragement to intending offerers to know, that the laying out of this estate is under the charge of Mr Brown of Linkwood, whose talents in that line are sufficiently known and established.

9*thly*, The estate of Lochnell, belonging to Lieutenant-General Campbell, lying on the banks of Loch Etive in Argyleshire, is the next that shall be mentioned at present. General Campbell says, that there are good farm-houses already built on this part of his estate, and that he proposes to build such dikes as may be wanted. Like most of the other great Highland estates in that county, these farms are proposed to be let as sheep-walks.

10*thly*,

10*thly*, The last property that I shall take notice of at this time, is the estate of Belmount, in the eastern district of Perthshire, which belongs to the Honourable Mr Wortley Stewart of Rosehaugh, where great encouragement is also held out to good and substantial tenants. This estate, lying in a part of the country where good farming is well understood, there is little doubt but that the system to be introduced under Mr Stewart's patronage may approach to perfection.

From the foregoing enumeration, it appears that several of the largest properties in the Highlands are at present to be let, and that the proprietors are disposed to give suitable encouragement to tenants who shall take them. It is true that offers are wished to be made for the farms; and, notwithstanding of all the objections that have been stated to this mode of letting land, it does not occur how the plan can be quarrelled with. I have been induced to mention these particulars, because I conceive that your Magazine is more read by common farmers than the newspapers. Some years ago, when the Earl of Galloway's estate of Baldoon in Wigtonshire was advertised to be let by auction on improving leases, particular notice was taken of the set, at different times, in the Farmer's Magazine; therefore now, when a number of the largest estates in Scotland are proposed to be let, it is proper that they should also be noticed.

To me these advertisements form a subject of pleasant reflection; as I conclude, from the terms in which they are couched, that the proprietors of the great estates in the Highlands of Scotland are really become anxious for their improvement, and disposed to give every encouragement for effectuating this object. And however chimerical the prospect may appear, of great improvements soon taking place in the Highlands or Islands, we have actually recent instances of the fact. Within the last 25 or 30 years, we have seen the judicious and spirited exertions of Mr Campbell of Shawfield bring about the greatest and most successful improvements in the island of Ilay; those of Mr MacNeil of Colonsay have had the same effect in that island; and more lately, those of Mr Macdonald of Ulva have also had the like effect.

As you properly observe, in the history of Scotish agriculture given in last Number, the Highlands of Scotland are at this time undergoing the same change that the Lowlands formerly underwent; that is, good farmers, from the south of Scotland, are introducing into the north a system of improved agriculture, as the soldiers of Oliver Cromwell did into the south, between the years 1650 and 1660; and in the course of half a century, the effects may probably be the same. With the assistance of lime, which I

understand is in abundance, and enclosing, and good tillage, and good woods, I would ask, Why may not Lord MacDonald introduce into the island of Skye as good a system of agriculture as Mr Campbell of Shawfield, with the same materials, has introduced into the island of Ilay? the soil and climate being supposed to be nearly the same.

But it is not in the Highlands only that we see farms advertised, and farmers from the south of Scotland invited to settle on them; but also farms in different parts of England and Wales are advertised in the Scots newspapers; and the most flattering conditions are held out to induce Scotch farmers to take them in lease. Indeed, we know that Scotch farmers have of late become famous in England; and that one of these, who formerly farmed in the neighbourhood of Edinburgh, now actually possesses a very large farm in the neighbourhood of London. Even Scotch farm-servants are not unfrequently brought to England; and we know certainly, that an illustrious and patriotic Scotch Nobleman, a few years ago, brought up from East Lothian, a farm-servant, whom he placed upon his farm at Caenwood, 5 miles from London, with his ploughs, harrows, carts, and other farming implements, brought from, and such as he was accustomed to work with, in his native country; and that this man exhibited, to the wondering farmers around him, a plough held by himself, and drawn by two horses; while they were ploughing in the next field, with a clumsy plough drawn by four horses, held by one man, and the horses conducted by another man as a driver. We know also, that a gentleman having some years ago taken a farm not far from Brighton, got Scotch servants to manage it entirely, after the most approved mode of Scotish husbandry, with Scotish implements of every sort.

These instances are sufficient to show in what estimation Scotish agriculture is held in England, and how much farmers and farm-servants, acquainted with the approved modes of farming practised in that country, are prized here. How different was the situation of matters only 50 years ago, when farm-servants were brought from England to teach Scotchmen the most simple operations! Whether the philosophical and chemical principles of agriculture are best understood in Scotland or England, I do not take it upon me decidedly to determine; but from there being an established Professor of Agriculture in Edinburgh, whose talents, science and skill in the art are universally acknowledged, and from the number of able chemists in Scotland, although none of them may perhaps equal the well-earned reputation of Mr Davy, I should be disposed, without any undue degree of national prejudice, to give the preference to the latter country.

Before

Before closing this short communication, permit me to say a few words on another topic, intimately connected with it. Besides the Board of Agriculture, we have many Agricultural Societies both in England and Scotland; but few of their Presidents are so active as Sir John Sinclair, and Mr Curwen, President of the Workington Farming Society, or we should know more of their proceedings. It is well known, that the indefatigable President of the Board of Agriculture is never-ceasing in his endeavours to promote his favourite art; and Mr Curwen seems to be equally assiduous in forwarding the purposes of the Society of which he is at the head. The last Number of the Magazine shows how zealous he is in bringing to public view the exertions of almost every individual within the bounds of his patriotic Association; and I hold it an undeniable truth, that every Gentleman and Farmer mentioned in his Report, will be more stimulated to proceed in his improvements, by having his name thus publicly brought forward, as an assiduous, spirited and successful cultivator, than if Mr Curwen had wrote fifty pages of scientific conjecture about the food of plants, or chemical discussion about the powers of oxygen in promoting their growth. Not but that such investigations are extremely important in a work purely scientific; but not so in detailing the practical labours of actual improving agriculturists.

I have no doubt that the improvements of many of the Gentlemen and Farmers in other counties are equally extensive, and perhaps considerably more important than those of the Gentlemen of Cumberland and Westmoreland, though they have not been brought forward in the same way. I am, Sir, yours, &c.

AMICUS SCOTIÆ.

London, 12th May, 1809.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On making Butter.

SIR,

I HAVE just been reading the 29th Number of your Magazine, and find *Betty Butter* has given you, in p. 60, an account of the method of salting butter in Banffshire. But being certain, that were the same mode to be followed in this county, we could not expect sale for our butter, since by the adoption of Betty's plan it could never be made to acquire that sweet and mild taste so much run upon by the families in Edinburgh, Glasgow, and those in the neighbourhood of these cities, who have received their butter from my dairy for near 20 years; I therefore take the liberty of sending you a short account of my method of salting

ing it; and may add, that some of the most honourable and respectable families in the nation, who are regularly supplied by me for their table, unanimously declare they get no butter so sweet as mine.

I however acknowledge, that I have not the same local advantages with Betty Butter as to grass; as I think that fine old grass, by a river side, must be preferable to mine, which is never above three or four years old, and often but one or two; the soil being also of a thin moorish nature, upon a bottom of cold blue till. However, with all these disadvantages, I last year sold my butter at 20s. per stone to my old customers in the above-mentioned places; and no person complained of the price; but several now complain that they have got too little of it, although I sold upwards of 60 tron stones.

My cows are milked at eight in the morning and at eight in the evening; and the number kept is from 10 to 12. Each cow's milk is seithed, either by itself, into a dish of wood, or two put together, according to the size of the dish. As soon as milked, it is set upon shelves of wood in the dairy or milkhouse, where it stands in general as follows, viz. the evening milk 34 hours, and the morning milk 22 hours; when the cream is skimmed off, and put into a vessel which holds one week's cream; and the milk is then made into cheese, which sells from 6s. to 7s. per stone. The churn is something like Betty Butter's, being a large barrel, which stands upon a frame made for the purpose; the inside work being driven round with a handle, the same as a pair of common fanners. The butter is made generally once a week; and in the morning previous to that operation, the churn is filled with boiling water, when the inside work is driven a few times round, and then the opening side of the churn is turned down, to let it out, the work being kept going round till the water be completely discharged, in order to throw out any sand or dust that might fall to the bottom, if the water was allowed to settle and run out of itself. The cream vessel is then brought, and the cream put into the churn, where it is wrought till the butter is separated from the milk; when it is taken out into a clean vessel, and the milk well wrought out of it. A corn sickle is then drawn through the butter, several crossways, in order to take out any hairs that may remain in it; and if any other motes appear, they are also taken out. This part of the work is generally done with the butter among clean spring water, as the water keeps it from turning soft, and washes away any milk that may remain.

The butter is then weighed; and for every stone, 10 ounces of salt are taken (after having all the motes carefully picked out) and mixed with it. The salting process is carefully performed with

with the hand; as I have always found, that if salt is not properly mixed and incorporated with the butter, at the time of salting, it never keeps so well. I am very particular in this part of the work, the salt being weighed with the same weight the butter is weighed with. In May and June, each stone of butter will take one ounce of salt more; and after the middle of August, it takes one less than the above-mentioned quantity. The butter thus salted is put into a clean well-seasoned kit, and a handful of salt shaken on the top, which keeps it from turning mouldy, or winding, till next week, when the butter is again made as above, and put into the same kit, on the top of what was put in the week before, without stirring it, and a handful of salt shaken upon the top. The same process is continued weekly till the kit is full; after which it is covered up, and set aside till my customer sends for it. It may be proper, however, to examine the kit occasionally, to see that it does not let out the pickle; as butter standing without pickle soon spoils. Indeed, butter salted in this way does not require pickle poured on it, unless the kit is defective.

I never use saltpetre, since butter made as above always retains the same sweet taste till used, which generally happens within twelve months after it is made. But as B. B. does not mention her reasons for putting so large a quantity of salt, along with about half as much saltpetre as is necessary to keep the butter without any salt at all, I will say nothing about it further, than that, if the quantity I have stated be properly mixed with the butter, it is sufficient.

If you think the above worthy of a corner in your valuable publication, by giving it (either in whole or with correction) you will thereby afford your numerous readers an opportunity, before the butter season commences, of seeing the above recipe; and they can choose any of the two they like best. I am, yours, &c.

Dumbartonshire, 1807. M. F.

P. S. I notice that your Eddlestone friends think thirlage to mills a hinderance to improvements; and so do I. But as I have a process at present, in terms of the act of Parliament, to come before a jury at Dunbarton in a few weeks, for the commutation of thirlage of a farm which I have taken a long lease of, I will not enter into any thing upon that subject, further, than that I think your correspondent A. B., page 20th of Number 29th of your Magazine, is wrong in justifying the jury for giving the full value of all multures, dues and services, without making the least deduction whatever, unless they still allow that the miller is to be bound to work and grind, if required by the possessors of the lands

lands so freed, without any payment, the same number of bolls of grain yearly which they themselves have fixed an annual payment for, from the possessors of the lands freed from said mill; as, otherwise, the possessor will be both paying for the holding up of a mill, and grinding of his grain, twice, if he carries it to the mill; and if he does not carry his grain to the mill, the miller may work the mill with his own grain, without giving much heed how he uses the machinery; well knowing, that he not only has his own wages already paid, but, when his mill-stones or mill-leads fail, he has no more ado but apply to the barony; it making no odds whether any of them have already paid for the upholding of these things or not, since they are to be paid for again, without having any method left them of getting redress. I shall just add, that I know of six different instances of processes on entailed estates being settled by a jury; and neither the upholding of the mill, nor the bannock-meal, or knaveship as it is in some parts called, were considered to be due.

M. F.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

A New Plan for sowing Turnips.

SIR,

A METHOD of sowing turnips suggested itself to me last season; but, though I found it to answer my expectation, yet, as it was a single experiment, I only communicate it to the public, as I have already done to some of my neighbours, as deserving a further trial.

I took one pound weight of best globe turnip-seed, which I mixed among two pounds of common tar, stirring the mass till the whole seed appeared regularly mixed with it. The mixture was then put into a watering-pan, all the holes being covered, except one, made large enough to allow a seed covered with tar to run out, dropped along the top of the drill, and covered by a light roller. The day being warm, the tar ran freely; and the seed showed a more regular braird than I had ever witnessed from any machine whatever.

Turnip seed, anointed with tar, will not be apt to receive damage either from hot or wet weather; and I am hopeful the practice may prove an insurance against the depredations of the grub and other enemies of that valuable root. If found to answer, a proper machine for sowing the seed may be suggested by and by.

Yours, &c.

BRANCH

BRANCH II.

Agricultural Intelligence.

The weather, through the past quarter, has constantly gone into extremes; and the cold, in one part of it, was not more severe than the after heat was uncommonly ardent. The beginning of March was not unfavourable to vegetation, which caused wheats and grasses to assume a growing aspect; but the latter part of that month, the whole of April, and the first ten days of May, were steadily cold,—often intense frost, accompanied with snow showers; which completely checked vegetation, and caused the country to appear in the sable dress of winter. From the 10th to the 28th May most favourable weather prevailed; and the fields, all at once, were animated with glowing verdure. A more striking, rapid, and general change in appearance, was perhaps never known; all our accounts concurring in this particular. A great alteration, however, took place on the 29th, which still continues. For some days past, the weather has been cold and stormy, accompanied with snow and heavy rains; from which circumstances serious evil may be dreaded.

Though the weather, to the 10th of May, was hostile to vegetation, yet it answered extremely well for labouring the ground; furnishing, perhaps, better opportunities of carrying on Spring work successfully, than usually experienced in this country. As the earth was rarely completely wet, the growing crops stood the cold winds much better than could have been expected; and, being deposited in a dry bed, which had been well prepared, were enabled to push off with advantage when genial weather came to their assistance. It remains to be seen, whither the check given this week to their progress, will ultimately be attended with much injury. This depends greatly upon the length of time that the present adverse weather may continue; therefore speculation upon it is superfluous.

Grain markets have fluctuated considerably, chiefly owing to the prospect of matters being accommodated with the American States. In Scotland, it is supposed that the stock in hand does not exceed what will be wanted till the current crop is reaped; but Ireland is presumed to contain sources of supply which will not be soon exhausted. In fact, were Irish agriculture sufficiently encouraged, that country might be rendered the storehouse of the empire. That a great deal has been done by the patriotic societies there, and even by Government, we willingly acknowledge; but much remains to be executed, before the resources of that fertile island can be fully brought into action. Perhaps, a deficiency of capital stock amongst agriculturists, may be considered as one of the leading obstacles to perfect husbandry; but other obstacles are also in the way, which must be removed before the art of agriculture can reach the summit of perfection. The tythe-system, of itself, is capable to impede improvement;

improvement; and why that system should not be changed, we have not hitherto learned. It is plain, that till tythes, either in England or Ireland, are paid by landlords, the country will not be improved; and, were the slightest doubt remaining on that head, a reference to the situation of Scotland would completely do away every objection.

Live stock of all descriptions have lately advanced in price; and there is reason to suppose that a fall will not soon take place. Indeed, the taste of the public for butcher meat seems to increase; of course, the increased demand must be attended with the usual consequences. Were British prosperity to retrograde—were trade and manufactures to languish and decline—or were any of the sources of wealth to be dried up, then it might be expected that butcher meat would fall in value, and that the people would be obliged to put up with food of a different description; but, so long as the country continues in a prosperous state, so long will the demand for butcher meat remain unabated; and as wealth increases with the middle and lower ranks, so will their inclination to be fed with butcher meat increase also. The price of butcher meat, in fact, is a true barometer for ascertaining the prosperity of a country, whose inhabitants have a predilection for that sort of food.

We understand, with satisfaction, that the Essays of Dr Rennie at Kilsyth, on the nature and properties of peat-moss, and the economical purposes to which it may be applied, are preparing for the press, and will speedily be published. It is one of the fortunate circumstances of the present day, that men of science and observation are more and more turning their attention to researches connected with the improvement of the country and the welfare of society; which furnishes a flattering prospect of national prosperity. Formerly, men of science thought such objects as this undeserving of notice; and either remained in a state of indolence, or devoted their time and talents to the investigation of matters confessedly of less importance to the benefit of mankind. No doubt can be entertained, but that the public will appretiate the endeavours of these gentlemen to enlighten and instruct them, in a suitable manner; as, by acting in this way, the strongest encouragement is held out to others for investigating subjects of the most abstruse nature. Dr Rennie's Essays are to be published by subscription; and there is reason to expect that a numerous list of subscribers will grace a work which treats of subjects acknowledged on all hands to be imperfectly understood, though of the first importance to the great body of British agriculturists.

The farming interest of Scotland have, of late, been assiduously employed in endeavouring to procure relief from the hardships which fall upon their body, in consequence of the present method of assessing them under the Property-tax act. Petitions from many counties have been submitted to the consideration of the Legislature; and there is cause to presume, that a solid foundation has been laid for obtaining relief at an after period. This business was greatly forwarded by a meeting of landed proprietors at Edinburgh in February

ruary last, as noticed in a former Number of this Magazine, where it was taken up on correct principles, followed by wise and prudent resolutions. But the farmers in Scotland are also much indebted to their brethren in Roxburghshire, who early came forward and steadily used the most appropriate means of obtaining relief. Though their endeavours have not commanded success in the first instance, yet they have done more;—they have shown that they deserved it. The farmers of Roxburghshire are a respectable body of men; many of them, first in professional rank; and all of them eminently gifted with loyalty and integrity. The endeavours of such men were therefore entitled to notice; and the Conductor of this Work, with pleasure, embraces the present opportunity of expressing the high sense which he entertains of their meritorious conduct.

But what shall be said of those two public bodies, the National Board of Agriculture, and the Highland Society of Scotland, who, on this important occasion, stood aloof, and allowed a number of poor, weak, silly farmers to fight a battle which more immediately belonged to them, as guardians of the agricultural interest? Did the directors of these institutions think that a premium for a cottage-plan, a ploughing-match, or even a good bull, would compensate farmers for the capital stock wrested from them under the injudicious and impolitical enactments of the Property-tax act? If these gentlemen thought so, we can only lament that their public conduct should be guided by such mistaken principles. Their meetings may prove exceedingly amusing to themselves, though apprehensions are entertained, that, ultimately, the interests of agriculture will, if they continue to act in this way, be little benefited. A national society, to be beneficial, should take up every cause which exceeds individual strength. This is the sole reason why a number of individuals associate together; and, except it, another cannot be assigned. The Board of Agriculture did their duty when they applied to Parliament for a general enclosure bill; and so did the Highland Society, when they offered a bill for the commutation of thirlage. Had these public bodies persisted in bringing forward measures calculated for benefiting the agricultural interest of the island, they would deservedly have been hailed as the protectors of agriculture; but, when they sit with their arms *a-kimbo*, and neglect the interest of the cultivators of the soil, in a point which decidedly affects them, a very different character must be given. It is not too late, however, to redeem their characters. To prompt a redemption, is the sole cause why their jejune conduct in the business alluded to has at this time been noticed.

When on this subject, it cannot be amiss, to extract some parts of a letter sent to a member of Parliament, with a view to explain the different situations of English and Scotch farmers under the Property-tax act. In doing this, we must hazard a repetition of some sentiments offered in the First Branch of this Number.

'I take the liberty of submitting to your consideration, some observations concerning the Property-tax as it affects the tenantry of Scotland;

land; and, in particular, shall endeavour to show, that the act has been more severely administered in this country than in England, though undoubtedly the Legislature meant to place the farmers of both countries upon an equal footing.

'In the *first* place, The Property-tax is not assessed upon farmers according to the extent of gains and profits, but according to an hypothetical rule, neither founded in truth, nor capable of being applied to the situation of any two farmers whatever. I need hardly state, that gains and profits are diminished, as the rate of rent is advanced, though the rule laid down in the act proceeds upon a direct contrary principle; and I need as little add, that the gains and profits of farmers depend much more upon their activity and industry, than upon the *quantum* of rent paid to their landlords. Were all farms set upon equal terms, and were all the occupiers gifted with the like genius and ability, it might not be difficult to find out a general rule of assessment; but, till equality subsists in these circumstances, every general rule must be regarded as false, arbitrary and oppressive.

'In the *second* place, the clause which directs a revaluation at the end of seven years, deserves to be considered as an enactment for laying a tax upon improvement; therefore, not only as grievously unjust to the occupier, but highly impolitical to the State. Let me explain myself, by a statement of facts. The farm in my possession has been all lately limed at a very great expense, and is now in high order; consequently of more value, by reason of the several improvements recently introduced. According to the act, the farm must soon be revalued; and, of course, my tax, as occupier, will be considerably increased. But that is not the worst of it. I will also be rated for the proprietor's share of tax upon the increased value of the farm, and altogether have to pay three shillings in the pound of that increased value. No doubt, part of the increased value may be attributed to the rise which has taken place upon land, or, more strictly speaking, to the depreciation which has taken place in the value of money; but still, for improving the farm, I am taxed for every halfpenny expended in making improvements, and *that*, at a time, when the capital stock laid out upon improvement ought to be returned to me in the shape of increased crops of corn and grass. Had the framer of the act wished to discourage agricultural improvement, he could hardly have pitched upon a more effectual mean than the one animadverted upon.

'In the *third* place, allow me to recal to your recollection, that Scottish farmers are not subjected to pay the proprietor's public burdens, on which account the rents paid by them are apparently more excessive than those paid by their English brethren. In England, one half of the real rent is paid to the church, the poor and the public, and by consequence the nominal rent stipulated to be paid by the tenant to the proprietor, or the rent which appears in the lease or agreement, is comparatively insignificant. Now, it is upon this reduced rent that the tax can, at the worst, be assessed; and, in this way,

way, the English farmer, though his tax is fixed by the act at 18d. in the pound, actually pays much less than the Scottish farmer who is rated at one shilling. Another circumstance may also be stated, as occasioning rents in Scotland to exceed those given in England for similar soils, and that is, the difference of the value of labour in the two countries. Owing to this circumstance, a farmer in Scotland is enabled to give the proprietor a greater share of the produce as rent, than practicable in England; though, certainly, the farmer's income in the former country is not thereby increased.

'In the *fourth* place, I have reason to believe, that low as rent is in England, when compared with what it is in Scotland, the tax has seldom been assessed according to the rent, but generally according to the poor's-rate assessment. If this is the case, we need not wonder at English farmers being silent, especially when it is well known that revaluation has seldom been exercised. In short, it appears that the Property-tax has been levied upon the farmers of England and Scotland, as differently as if separate acts had been passed by the Legislature for taxing the farmers of both countries. In Scotland, the tax has been levied upon the full rent, leases being directed to be produced, so as *that* rent might be ascertained. Where the period of possession exceeded seven years, a revaluation instantly took place, which revaluation was conducted without any regard to the age, abilities and circumstances of the occupiers, though upon these things the extent of gains and profits evidently depend. In a word, the system adopted for administering the Property-tax differed as widely in the two countries as their respective civil governments did in the arbitrary reign of Charles II. Perhaps much of the severity of the system arose from an exposition of the act, said to have come from an official gentleman in Edinburgh, who very kindly undertook to explain several enactments which the commissioners were unable to comprehend, till a meaning was furnished by this pragmatical gentleman.

'In the *fifth* place, it must appear absurd in the eyes of every reflecting person, that tenants are not allowed to prove a loss, when any thing of that kind is sustained, in the same way as permitted to merchants and manufacturers. Most assuredly, in cases where farmers can prove that they have neither gains nor profits, it is the *acmè* of oppression to rate them as enjoying full and ample incomes. A neighbour of mine was last year rated for 420*l.* of income, who, to my certain knowledge, lost 800*l.* of his capital stock. It no doubt is very convenient to fix upon rent as the criterion of assessment; but care should be taken, when promoting public conveniency, that injustice to individuals is not exercised. Were the commissioners allowed in future to hear farmers when losses are sustained, and to grant them relief when it can be proved, either by parole or written evidence, that their incomes were below the sums upon which they are assessed, justice would be done to individuals, whilst the public

would not suffer. At present, justice cannot be obtained. In fact, according to the existing mode of assessment, the tax is upon land, not upon gains and profits.'

SCOTLAND.

Banffshire Quarterly Report.

Since the 20th March, we have experienced very backward weather for the operations of seed work. The oats have been put into the ground under most unfavourable circumstances, and a good deal remained to be sown so late as the end of last week. Bear sowing seems to be within a narrow compass, as it is already generally over. Vegetation has been much checked till within these few days; and provender is immensely scarce. Notwithstanding the backward state of the weather, many of our best wintering stots have been sold, and at very fair prices, say from 8s. to 9s. per stone sink, which has given considerable relief. Grass parks are letting rather dearer than last year, and principally to dealers; which we look upon as a sign of the trade reviving in some degree.—10*th May.*

Letter from Langholm, 24th May.

'The early part of the spring was singularly favourable to every kind of field operations. The oat seed was, in general, put into the ground under the most promising auspices. After this, a course of cold barren weather, accompanied with frost, and snow-showers, continued until the end of the first week of May; since which, we have had warm sultry days, with thunder and rain. From the bleak weather, and barrenness of the season during the month of April, the progress of vegetation was much checked; but the late refreshing showers, and warm temperature of the air, have brought both corn crops and grass rapidly forward.

'Excepting a sudden start which the grain markets experienced about the beginning of seed-time, the prices of victual have been pretty steady of late. Butcher meat, from the failure of the turnip crop, and lateness of grass, is now got scarce, and sold at a high price. Hay, however, has been plentiful, and is moderately rated. Sheep and black cattle are in good demand, with prices somewhat higher than those of last year. Horses, of good shape and size, are in great demand; and fetch high prices. The dry weather has been favourable to the stock-farmers during the lambing season; and a plentiful supply of lambs for the market may be expected. Excepting where the *rot* has been partially felt, sheep-stocks have been unusually healthy through this district last season. At our hiring market at Langholm this day, servants' wages were somewhat better than last year.'

Letter from Ayrshire, 24th May.

'Since about the middle of February, the weather, upon the whole, has been uncommonly fine, and as favourable for the various purposes of agriculture as the farmer could desire. Towards the middle

middle of April, there was a dry frosty wind for the space of eight or ten days; but, throughout the whole spring, there has been no falls of snow nor rain to drench the ground and retard farm-work. The seed has been put into the ground in a good state; the fallows have wrought kindly; and every species of crop, in so far as it has advanced, is looking well.

'Till of late, the pastures, owing to the long course of dry weather and cold, were very backward; but, within the last fortnight, the weather has totally changed, and become much warmer than is usual here at this season of the year, with a considerable deal of thunder and refreshing showers; which has occasioned, for the time, a most rapid vegetation, and a total change upon the face of the earth.

'The fear of want that was entertained at one time, on account of the stoppage of our intercourse with foreign nations, seems to be entirely done away. There is, at present, no report of want, nor any dread of scarcity. Through the season, grain has kept remarkably steady, at such a price as to indemnify the farmer, and not prove too heavy for the consumer. Oat-meal, in Ayr market, by retail, has not exceeded 1s. 10d. the peck; wheat has sold at about 40s. the four bushels; barley, 43s.; and bear from 36s. to 42s. the Ayrshire boll, (eight bushels.) Common oats, for seed, have sold for 35s.; and potatoe-oats as high as 40s. per boll.

'Owing to the good spring, and plenty of fodder, cattle have been kept in good condition. There has been a great demand for them, a ready sale, and a considerable advance in price since last year. If we take the average from 15 to 30 *per cent.*, we will not perhaps be far distant from the mark. Milch cows and young cattle have risen most. The price of meat in the shambles, both in Galloway and Ayrshire, has been still higher than the proportion of price given to the feeder.

'Good farming is daily creeping in, and old prejudices are wearing out. Perhaps nothing has contributed more to this change than the general rise of rents that has taken place. This is like the land of necessity;—a man must either do or die. Notwithstanding that rise, and the various pressures of the times, the demand for farms continues as great as ever. The greatest pressure is the Property-tax. Every farmer feels, and cries out against the partiality and injustice of it as it affects them. The farmers in this county have joined with their brethren in other parts of Scotland in a petition to Parliament; and their case is so strong, that it is impossible but they must receive redress from the good sense, the justice and liberality of Parliament. They have no objection whatever to pay 10 *per cent.* from their income; but they conceive the manner in which it has been imposed unequal and oppressive in the highest degree; insomuch that there are not wanting hundreds of instances, where, instead of ten, they have twenty and thirty *per cent.* to pay; and, what is worst of all, to pay out of their capital expended in improve-

ments; and while these are going on, they are perhaps not making a shilling, but sometimes are great losers.

'The price of labour, and wages of mechanics, are nearly the same as when I wrote you last.

'I had almost forgot to mention, that, on account of the great demand for horses to refit the cavalry, the price of good ones has risen uncommonly high. It is but a sorry horse, now-a-days, that a man will not ask thirty guineas for.'

West Stirlingshire Quarterly Report.

THE mild and genial weather which commenced in February, continued without interruption till the beginning of April. An early and vigorous vegetation ensued; pastures rapidly improved; and cattle of all kinds began to neglect their fodder in the house, and to place their chief dependence on the first fruits of Spring. In the beginning of April, we had frequent, though transient falls of snow, which were succeeded by four weeks of excessive drought, occasioned by a burning sun through the day, and by severe frosts through the night. During this period, verdure forsook the fields; and dry fodder was in as great request, and consumed in as large quantity, as during any month of winter. The lambing season was unfavourable, from the snow by which it was accompanied, and from the drought by which it was succeeded; yet there was no uncommon loss of lambs sustained, as the ewes were greatly improved by the preceding favourable weather. During the last two weeks, there were frequent showers, attended with thunder, which have improved the temperature of the climate, and raised the hopes of the husbandman.

Wheat, except in a few sheltered situations, and on a very rich soil, is very unpromising. Owing to the prevention of the tillering process, by the unfavourable weather of April, the fields are thin; and, though the season has improved, yet, from its advanced state, there is no prospect that the evil will be remedied, or that the crop will be ample.

A general tendency appeared this season to avoid the danger incurred in the last, from hastening the seed-time. Except in the Carse, where the beans and oats were early delivered to an excellent seed-bed, little grain was sown in this district during the favourable weather in March. Even in the drought of the succeeding month, sowing and ploughing were occasionally suspended, from the apprehension of injury to the seed by the severe frosts. The great object, in this place, is to sow upon hot furrow, that is, upon the soil, immediately after being turned up with the plough. The seed rapidly vegetates upon this fresh soil, and the braird is enabled to contend on equal terms with the indigenous weeds. If the seed process does not immediately follow the seed-furrow, the weeds, during the interval, obtain a confirmed possession of the soil, and materially injure—if the season is backward, completely overpower—the future crop. Our farmers, acting upon this system, retain a predilection

for

for beginning the oat-seed on the first week of April, old style. This season, the oat-seed was not finished till the end of that month.

Though a large extent of ground was laid last year under potatoes, and though the produce was abundant and excellent, the whole crop is nearly consumed. Potatoes, for seed, were scarce; and the price rose to 10s. per boll of barley measure, though it was only 5s. in the end of harvest. Double the usual quantity is planted this season; and, if an excellent preparation were sufficient to ensure the crop, we might expect an abundant one. Barley-seed followed in course; the last patches will be finished this week.

The braird does not seem to have been injured by the unfavourable weather of April; it looks in general healthy and vigorous. The hay crop has suffered most; and, as it was beginning to shoot when the weather changed, little future improvement can be expected. Pasturage is beginning to afford a full bite. Markets for cattle are high. All the young stock in this district, both stots and heifers, was early bought by dealers from Galloway and England: their place is supplied by cattle from the Highlands. Oatmeal sells at 30s. per boll. The sale is at present dull; but, as there is now little native grain, the demand will probably soon improve. —*May 24th.*

Aberdeenshire Quarterly Report.

The Spring season set in early and favourable. From the 24th of February, till about the same date in March, the weather was mild, dry, and highly adapted to every agricultural purpose. During that period, one half of the oats might have been sown in a very promising state, and the harrowing finished in the very best order. Lean stock were also much kept out on the pastures, and a saving of provender obtained, which was greatly wanted. After that, the weather altered; snow fell plentifully for about a fortnight, when rain and snow took place alternately, with cold winds from the north-east, north, and north-west; which put a stop to every kind of field-work at times, and rendered that which was done exceedingly unseasonable. This state of weather continued until the 8th of May; and left scarcely an atom in the stack-yards all over the county. One half of the oat-seed, with more than two-thirds of the bear, were deposited, during that space, in a very unpromising situation; but the weather for the last three weeks has been so warm, dry and favourable, as to bring up both grain and grass, and to give a gloss and look to the country which it seldom exceeds at this season. The hay-fields promise a good crop; and grass-parks have set fully up to last year's prices, which were very high. The turnip ground has wrought exceedingly well for some time past, and will be in fine order for the seed by the time of sowing. A considerable number of fat cattle were bought up here for the South, throughout the spring months; of course, that article rose in value. Prices from 50s. to 60s. per hundred weight, sinking the offal; at which they still continue. Lean stock are also sold

considerably above last year's prices. Sheep have advanced but little, not being much kept in this county.

In the price of grain there has scarcely been any alteration since the date of last Report. For some time it was rather flat; and still there are few merchants in the way of purchasing for distant markets; but the quantity on hand, except on gentlemen's farms, is inconsiderable; and a small advance has taken place for the last three weeks in the market of Aberdeen. There is no alteration on the price of labour.——*May 26th.*

Berwickshire Quarterly Report.

We had a week or two of tolerably mild weather at the beginning of the quarter; but the last week of March, and the whole month of April, was so unseasonably cold, that vegetation remained almost quite stationary. May has, however, entirely altered the scene, by a warmth as much above the usual temperature as the preceding month was below; and the change produced in the vegetable world has been proportionably rapid.

'From the moist meadow to the wither'd hill,
'Led by the breeze, the vivid verdure ran,
'And swell'd, and deepen'd, to the cherish'd eye.
'The hawthorn whiten'd; and the juicy groves,
'Bursting their buds, unfolded every leaf,
'Till the whole waving forest stood display'd
'In full luxuriance to the sighing gales.'

The weather having been dry throughout, proved exceedingly favourable to field operations. The sowing of spring wheat commenced about the 21st of February, followed by the other grains in succession; and, notwithstanding the backward state of ploughing, at the commencement of the quarter, every operation connected with the spring seed was completed by the end of April in fine order. Most of the Swedish turnip are already sown; and fallows for common turnip are in a forward state of preparation.

Winter wheat, though in some cases rather thin, has all along exhibited a healthy aspect; young clovers appear in general sufficiently thick, and are now thriving; but, with regard to other pastures, they were in many situations kept excessively bare, till May set in. The spring corn has everywhere made a healthy braird, except on some wet-bottomed soils, where the grub seems to be lurking; and on these the plants make but a thin appearance.

The crop of lambs in the low district may be reckoned nearly as full as usual; though, from the backwardness of vegetation, they were at first but poorly supplied with milk. This deficiency was, however, more severely felt in the hill-district, where many of the lambs died for want of sustenance. The loss of young sheep has also been considerable in the Lammermuir district.

Stock in forwardly condition for grazing, has found a ready market, at prices fully equal to those of last season; but, where back in condition, it has had few buyers. Fat has been much in demand.

Beef

Beef at 7s. 6d. to 8s. 6d. per stone, sink; and Mutton at 7½d. to 9d. per lib. do. avoirdupois weight. Grass parks have, upon an average, let at lower rents than last year.

The corn trade having, for some time past, been under the influence of political arrangements, which baffled every attempt at calculation as to future supply, speculation has, in consequence, been nearly at a stand, and markets dull. —— *May 28th.*

P. S. Since the above was written, a fall of at least 15 degrees from the heat experienced of late, has occurred. This morning, the hills in the neighbourhood were all white; and, in particular, Cheviot was thick covered with snow.——*May 30th.*

Fiars of Berwickshire, Candlemas 1809, for crop 1808.

Wheat, per boll	L. 1	10	8	Linlithgow Wheat Measure.
Peas	1	10	8	
Barley	1	11	0	Linlithgow Barley Measure.
Lammermuir do.	1	10	0	
Rough Bear	1	8	0	
Melrose Oats	1	4	0	
Lammermuir do.	1	3	0	
Oat-meal p. boll of 8 st. Dutch	1	5	0	

Upper Annandale Quarterly Report.

The spring quarter has been unusually cold; but as there was a great deal of dry weather, the labours of the field went on readily.

Seed oats and potatoes were put in with advantage. The oat braird rose equally; and, though now in much want of rain, it has not been greatly injured. Some partial showers, that fell, with thunder, have been of service to young sown grasses, and to all sorts of growing crops. Yet the hay crops are so parched at present, as to threaten to rise thin and light: and the roller must be applied to the oats, unless rain come on very soon. The latter part of April was cold for the lambs; but being free from snow showers, or cold rains, not many have perished.

Markets for sheep, cattle, and wool, are good, and rising. Victual remains nearly stationary. Hay is cheap; but must advance. Labour extremely high.

It is now late enough to sow Swedish turnips; but the lands are preparing with advantage for later sown turnips; nor is this plant so great a favourite among our farmers as potatoes, which are easier kept clean, and less precarious as a crop.

A respectable and public-spirited gentleman in this county, has fed his working horses with steamed potatoes and hay, without a particle of corn, for months; and during all that time, the horses have wrought regularly in the fields, and have been in excellent order. This result was not expected by the servants or people; but such is the fact. The steaming apparatus is simple, and executes the work, almost to any extent wanted.——*May 21.*

Ross-shire Quarterly Report.

Since the first of March, the weather has been remarkably dry, at-

tended with an uncommon prevalence of cold, during the most of that period. Field operations were executed in the most satisfactory manner; but until the 7th of this month, vegetation was entirely at a stand. The seed was never put in the ground in fairer order; and a full braird of healthy plants, which have been much forwarded by the last three weeks of genial weather, inspires us with hopes of a plentiful harvest. The wheat fields are well stocked with plants; and their vigorous aspect justifies the expectation of a full crop. Hay fields likewise look well; but, it is suspected, rather want moisture, so as to render their produce weighty. The turnip fields have had the finest weather for preparing them; and a few of the Swedish kind are already sown. Indeed the loss sustained by rot in the preceding winter does not render it adviseable to sow so early as this, considering that the whole of our stock must in general be kept on turnips till the beginning of May. On a fair comparison, the red turnips stood last winter as well as the yellow; and whites and reds, both sown the beginning of July, did not show any difference of soundness in the month of April. The extent of rot, evidently appeared to be, according to the degree of maturity of the crop, or nature of the soil, and not according to the different kinds. The idea, therefore, of the whites being more tender than the reds and yellows, has likely arisen, from that kind being generally first sown.

The cold frosty weather of April, with occasional blasts of snow, came unseasonably for the young lambs: their number, of course, will be diminished, as well as the quality affected, by the want of food for the mother, which, however, will be got the better of by the fine weather of the last three weeks. It is stated with pleasure, that Sir George Mackenzie's Merinos continue to thrive; although it is proper to mention that his management of them, and all stock, is very superior, they being reared with almost as much care as, it is reported, one of the Dukes of Athole bestowed on the Larix, when he first introduced it on his estates, and had it planted in a hothouse; therefore we may not despair of seeing the Merinos thrive in situations not possessed of first-rate advantages. Cattle of every description have sold readily this spring; but not at high prices. Those in good condition for going south, have not exceeded 7s. 6d. per Dutch stone, sinking the offal. The corn trade is over for the season, excepting for barley, which sells in retail to smugglers at 40s. 42s. to 45s. Oatmeal is already scarce. Price nominal, from 34s. to 40s. per 9 Dutch stones. Viewing the difference of price in the south, it might be expected that importation would soon cause a reduction; but the trade of the middleman is so troublesome and hazardous, that few are tempted to embark in it.

Attempts are now making to introduce good roads in the low-country districts of Ross. It is unnecessary to comment on what is so indispensable towards the improvement and respectability of a country.—Judgment in their profession, appears to be the characteristic of those who are projecting and carrying on these works; and

and should the landlords display liberality of disposition, and not thwart the plans of the surveyors, it may be hoped that this county will be improved in a manner much surpassing, and at a period much sooner, than what could have been expected a few years ago.

May 28.

Letter from Falkirk, May 29.

'More favourable weather than that of last quarter, for executing, in the most perfect manner, the various operations of spring-seed work, could not have been wished for. That important process met no interruption; but the weather, being at the same time rigorously cold, proved highly unfriendly to vegetation. I never saw the district present a more generally sterile aspect than it did this season up to the second week in May. Since that period, however, appearances are much changed for the better; and having had, within the last two days, a very ample supply of rain, it may fairly be expected that things will push on rapidly. The rain came very opportunely for the hay crop, which was in a critical state; for although there is no deficiency, either of rye-grass or clover, the former had generally come into ear, while it was at the same time very short; a coincidence greatly against a heavy crop of hay. Spring crops generally look well, although rather backward. This however may be soon made up, should warm weather succeed the late rains. The grub-worm, from which our oats suffered considerably last year, has not been observed this season. Many fields of wheat look extremely well, and promise a full crop; the greater number, however, are thin on the ground; some, indeed, from this cause, were ploughed up in the spring. Our grain markets were pretty steady through last quarter, till of late that they have fallen considerably; and, in consequence of our new relations with America, a more considerable fall is yet looked for—greater probably than will be realized.

'A very considerable rise in the price of cattle has lately taken place, which, with some also in grass parks above last year, will make grazing a doubtful concern this season, unless prices are uncommonly high during the autumnal months.

'In this district, scarcely a word has been heard of the injustice and partiality of the Property-tax from the tenants themselves. This, however, is not very surprising; for the best of all possible reasons, that they have felt little or nothing of its hardships. This arises chiefly from the smallness of farms in the Carse, which, in some cases, exempts them altogether from its operation, and, in many, from the *maximum* of the tax. Unless rent is above a hundred pounds, they do not possess a taxable income; and, if under three, they pay on a scale below 10 per cent. It is pretty generally believed, too, that they have been tenderly dealt with by the commissioners, in assessing for surplus rent, where they have been in possession above seven years. Under such circumstances, where there is so little real cause of complaint, to murmur would be very unreasonable;

sonable; and not much less unreasonable to expect, that a set of men, satisfied with farms of fifty acres, (and this quantity is probably rather above than below the average extent of Carse farms), should interest themselves much about their brethren in other districts, far differently situated;—when we see proprietors, men of liberal education and enlightened minds, and who must ultimately, although not always immediately, bear the burden, looking on with almost total indifference about the matter, and without bestirring themselves with activity to remedy the evil. What has hitherto been done, has been merely the efforts of a few active, public-spirited individuals, and by no means the united exertions of the great body of proprietors, which could scarcely, ere this time, have failed to remedy the evil in question.'

Inverness-shire Quarterly Report.

THE spring quarter, on the whole, was favourable for seed work and for the young lambs; but backward for vegetation till the 5th instant, when the weather became warm and agreeable. Since that time, some fine showers of rain have brought forward the grass and corn in a wonderful manner; and hay and wheat fields promise to return abundant crops. The preparation for turnip goes on briskly, and a good deal of the Swedish sort is already sown. Notwithstanding the severity of the frost last spring, yellow field turnip stood the weather nearly equally well with the Swedish; but white turnips suffered much, to the great loss of those who depended on them.

The demand for cattle of all descriptions has been very brisk of late; and a much greater number are already driven south, than usual at this period of the season. Fat beef and mutton being scarce, are selling at 7d. and 8d. per lib. There is a full supply of oatmeal still in the country; and prices have not yet exceeded 32s. per boll of nine stone. The locks of the Caledonian canal, on this side, will be all finished this season, with the exception of the sea lock, which is not yet begun. They are fully as forward at the west end. The excavation goes on briskly. The landed gentlemen of this county, at a general meeting on the 2d instant, took the Property-tax, as it affects farmers, into consideration; and, after considerable debate, agreed to the following resolutions on that subject.

'*At Inverness, the 2d May*, 1809.

'In a General Meeting of the Commissioners of Supply, Freeholders, and other Heritors, and Justices of the Peace of Inverness-shire.

'The Hon. Col. Archd. Fraser Lovat, *Preses.*

'The Meeting having taking into their consideration the Property Tax, in so far as it affects Farmers,

'1. *Resolved*, That in a moment when the Empire is pressed with danger, and when we are contending for our dearest rights with an enemy whose unprincipled ambition has involved most of the other nations of Europe in distress and ruin, War Taxes are necessary; and that it is the duty of every subject to submit to privation, and bear a rateable proportion of them.

'2.

'2. *Resolved*, That the principle of fair taxation is an equal distribution of the burden on all ranks and orders of the community, according to their respective means, correctly estimated.

'3. *Resolved*, That this, in particular, was intended as the groundwork of the Property Tax, which, taking a complex view of the subject, in its spirit and fair operation, was meant as a deduction of *ten per cent.* from every individual's free income, and no more, whether arising from trade, profession, or capital; or from all combined.

'4. *Resolved*, That as the law now exists, this equitable rule has been departed from in the case of the farmer in Scotland; who is assessed to the Property Tax on assumed data that neither ascertain his profits nor capital.

'5. *Resolved*, That *a fixed standard*, by which to estimate his free income, will render the tax more productive to Government, and less vexatious to the farmer, than the right of appeal, as an amendment of the present law.

'6. *Resolved*, That a farmer's capital, in general, may be estimated at four times the amount of his rent; and that the free profits on this may be fairly averaged at seven and a half per cent., and no more. Indeed, 100*l.* *per annum* of rent will pay 3*l.* of Property Tax; and so, proportionally, according to the rent reserved. And though this cannot be considered as an unexceptionable rule in all cases, by which to estimate the farmer's free income; yet it appears better to submit to partial grievances, than to run the risk of a large defalcation of revenue, by recurring to the right of appeal—where, in particular instances, objections to this criterion of taxation might be well founded.

'7. *Resolved*, That the principle of this alteration being to tax the farmer ten *per cent.* of his free income arising from capital employed, it ought to affect all descriptions of people renting land, without exception; the same rule being applicable, in this case, as to annuitants in the funds.

'Signed in name, and by appointment of the Meeting,

'A. Fraser Lovat, Preses.'

Mid-Lothian Quarterly Report.

The spring quarter has proved, throughout, remarkably favourable for field labour; of course, the various seeds have been deposited in the ground in the best possible order. Vegetation, however, with the exception of a few days in March, seemed to make little progress before the 7th current. Nay, even so late as the 3d, ice was visible on the small pools.

Turnips of the Swedish kind have been sown some time since, and are now above ground; a circumstance of great importance, as it is now well ascertained, that early sowing in May is the only chance of raising this root to a great size, and securing a good crop. The wheats, in some fields, have been thinned by the frosts, and in others they have been ploughed down; but these instances are by no means general; for, upon the whole, the country everywhere presents a promising aspect.

Stacks

Stacks are getting thin in the corn yards; yet, though last crop was certainly deficient, no apprehension of scarcity is entertained. The markets are fully supplied, and prices rather lower; a circumstance which evinces, that the fears of those are not well founded, who dread want whenever there is not a great importation. Fat cattle are high in price, owing to the great demand from England; and cattle of every description have advanced considerably.——*May* 29.

Dumbartonshire Quarterly Report.

During the past quarter, the weather, with the exception of the cold in the month of April, has been just as favourable as the farmer could wish. The whole of March consisted of mild, dry, settled weather, which permitted field work to go on without interruption. April, though very cold, with hard frosts occasionally, which stopped vegetation, and hurt the wheats and clovers, was equally favourable for labour; and May, after a few days at the beginning, has afforded excellent weather. About ten days ago, the crops were feeling the effects of the heat and drought; but, since that time, we have had fine warm rains, which have made every thing flourish in the highest degree. It is seldom that the heat is so great in May, as it has been this year. On some of the warm days about the 18th, the thermometer stood at 79° in the shade at mid-day, being within three degrees of the greatest heat in this quarter last summer, when the weather was uncommonly warm.

With such weather as might be expected, the labours of the quarter have been executed in the most regular and complete manner, without hurry or delay; the braird has come up thick and vigorous, and every thing gives promise hitherto of an abundant crop. Wheat, in general, looks worst of all, in consequence of the cold in April; but it is recovering fast, and may yet amount to an average. Many potatoes have been planted this year, and a good deal of bear sown; the principal cause of which last is, that experience proves it to be by far the best crop with which to sow grass seeds, the inferior value of the barley crop being, in some degree compensated by the superiority of the grass. This holds more particularly on all soils, except those rich fertile moulds, of which we have few or none in the west of Scotland; and it has induced many farmers, who would otherwise sow grass with their wheat, to take a crop of barley the following year, with three furrows, or a crop of oats with two furrows, and then to sow their grass seeds. The propriety of this last practice is very questionable, and it cannot be excused on any ground but the uncertain state of the barley market. It is, therefore, an object of importance, as indispensable to the permanent interest of agriculture, that the barley should be preserved, and never interfered with, unless a very strong case is made out.

Markets have been higher than usual during this quarter, particularly butcher meat of all kinds, which may be owing to the present state of the distilleries. Oats and oatmeal sell about 29s. per boll. A

good

good deal has been imported from Ireland. Potatoes are of excellent quality at 20s. per boll, large measure. Lean cattle have been higher in price, and quicker in sale, at the late markets, than for two years past. This may be owing, in some measure, to the forward state of the pasture grass, which is very good.—*May* 29.

P. S. Since writing the above, an unexpected reverse of weather has taken place. The wind went round to the east, with much rain, and very cold. It afterwards began to snow; and this morning, the 30th, even the low grounds are covered with snow to the depth of two or three inches; a thing, perhaps, never witnessed before, so far on in the season, and which must injure the forward wheats by crushing them down.

Forfarshire Quarterly Report.

A CONTINUATION of dry weather has prevailed throughout the preceding quarter; and, of consequence, every kind of seed work has been executed in a satisfactory manner. Until the second week of May, vegetation was much checked; but after that period it pushed on very rapidly. The season has been favourable for cleaning turnip lands and fallows; and, on some farms, the sowing of ruta baga and turnips is already begun.

Prices of grain have fallen of late; but the quantity in the hands of the farmer is inconsiderable. Decent Wheat brings from 42s. to 45s.; Barley 25s. to 30s.; Oats 28s. to 30s. per boll. Cattle markets went off briskly at first, but afterwards became dull; now, when vegetation is forward, the demand is greater. Prices are fully higher than last year. Fat is scarce, and brings about 11s. to 12s. per stone. Grass Parks have let beyond any former rents, at least 10 *per cent.* From 4*l.* to 6*l.* per acre, and even higher, has been promised for ordinary fields. The price of Horses is now become a serious matter to the farmer; a good pair cannot be got under 120*l.* The price of labour is nearly stationary. Hands were plenty at the preceding term.

Many Wheat fields are thinly planted this season; particularly after well made fallow, sown about the end of September. Several fields have been sown in March, which will ascertain the propriety of spring sowing in this county. The Hay crop does not promise to be heavy, although it is certainly benefited by the late showers. The braird of Oats, Barley, and other spring grain, is, in general, close.

A lethargy still prevails with the farmers of this county in taking steps to get the Income-tax on farmers equally assessed with the rest of the community,—*May* 30.

Dumfries-shire Quarterly Report.

A HAPPY change of weather took place early in the spring. The wheat sown in November was kept long under ground; but both it, and that sown earlier, were less injured than might have been expected by the extreme frosts and tempestuous weather in the winter. These crops are now looking healthy and well. Some seed of Lincolnshire

colnshire spring wheat has been brought to this part of the country from Edinburgh. It appears to be the same kind which was pretty generally cultivated in Cumberland and this neighbourhood thirty years ago; but this now brought seems a very inferior sample, perhaps owing to its being in some degree mildewed. It looks, however, pretty well in braird. When formerly raised in this county, it was at first thought an acquisition: not as being equal in quality to good winter wheat, but because it grew abundant in quantity, and with the same culture, when sown at the same time with barley. It was, however, at length entirely given up, on account of its tendency to smut. Perhaps the same efficacious means now used to prevent that foul disease, were not then practised. If such will prevent it from affecting this seed now, it seems not unlikely but it may still be found an useful and advantageous variety in many situations and seasons.

The oat seed was sown in seasonable weather, and the ground in condition better than ordinary. The barley seed season was also good; and all these crops are now in a promising state.

All the crops of last year have turned ont well; more grain having been brought to market than was expected, and some still in the yards. This may be imputed to the fertility of the crops in the inland and upper parts of the county, where many of the inhabitants, who for ordinary are buyers of meal and grain, were supplied at home. This apparent state of the barn-yards and granaries, with the prospect of the American markets being open, has brought down the price of all grain. Wheat is now sold from 11s. to 12s.; Barley from 4s. 6d. to 5s.; Oats from 3s. 6d. to 4s. the bushel; Oatmeal at 3s. the stone.

The turnip crop failed early in February, owing to the extreme frosts and changes of weather. In March, none of them remained but the Swedish kind, which made the superior value of these more generally allowed. To the failure of turnip may be attributed the scarcity and high price of animal food in the spring. Beef now sells at 10s. the stone of 16 lib. sinking offal; Mutton at 8d.; Lamb at 6d. the lib. Lean stock is fully in proportion, perhaps owing to the loss of sheep and lambs in the two former springs. The seasonable weather of this last will probably have the reverse effect. The crop of lambs (as it is called) is reckoned good and abundant. No other circumstance appears to affect the quantity of animal food so much, as the mildness or severity of the month of April, not for that month alone, but for years thereafter. The Spring or April food for sheep and cattle should therefore be the greatest study of the agriculturist.——*May* 30.

Letter from Glasgow, 31st May.

'The weather, during the month of March, was peculiarly favourable for putting the seed into the ground. In April, however, it was cold and frosty, and, of course, adverse to the progress of vegetation. It was not before the 7th of the present month that a propitious

propitious change took place. From that date till Monday the 29th, the weather having been fine and warm, accompanied by refreshing showers of rain, the growth of the young crops was visibly great; and everywhere they exhibited a vigorous and healthy aspect. On Monday, however, we were visited with a very singular storm at this advanced season. The whole of that day was extremely cold, and in the evening there was a heavy fall of snow. Yesterday it was equally cold, with much snow, and a keen frost through the night. To-day, though fair, the cold still continues. We hope this storm will soon give place to more genial weather, otherwise great injury will be done to the growing crops.

'The long tract of dry weather which we experienced during the course of the spring, enabled farmers to plant a greater quantity of potatoes than they have ever done in any former year. In fact, the cultivation of this esculent, followed by wheat, seems now to be the principal study of farmers; for it is by the adoption of this plan only, that they can afford to pay their present high rents.

'Our supplies of wheat, during the last three months, have been chiefly drawn from the north and east of Scotland, with a few cargoes from Ireland; but we expect large arrivals of wheat and flour from the States in the months of July and August, in consequence of Mr Erskine's recent arrangements with the American government. In expectation of such supplies, coupled with the recent fine weather, the price of this grain has of late declined considerably. It will still go lower, if the weather should be favourable; for it is on the produce of our own country, more than foreign importations, that we now in an especial manner depend for cheap markets.

'During the last quarter, the importation of oats from Ireland and the south of Scotland have been vast. We calculate, that, in that time, not less than 70,000 bolls have arrived in our river. This great influx has caused a considerable reduction in the price; and, as large supplies are still expected, it is probable the price will experience further diminution. The quantity of barley on hand is but small; nor is it much wanted, the malting season with the brewers being nearly over. The stock of beans and peas is large; and, as the demand now begins to diminish, we expect, of course, lower prices.

'State of Glasgow Markets, Wednesday, 31st May.

Foreign Red Wheat,	45s. to 48s.	}	p. boll of Linlithgowshire measure.
Scotch do.	44s. — 46s.		
English do.	47s. — 88s.		
American do.	50s. — 52s.	}	ditto of 240 lib.
Irish do.	45s. — 47s.		
Irish Mealing Oats	26s. — 29s.	}	ditto of 264 lib.
Do. inferior do.	23s. — 25s.		
Scotch Potato do.	28s. — 29s.	}	ditto Renfrewshire measure.
Ditto Small do.	24s. — 25s.		
English Barley,	38s. — 39s.	}	ditto Stirlingshire ditto.
Scotch do.	28s. — 30s.		

Irish

Irish Barley,	29s. — 32s.	p. boll, Renfrewshire measure.
English Beans,	34s. — 36s.	ditto Stirlingshire ditto.
Scotch do.	30s. — 33s.	
English Grey Peas	33s. — 34s.	ditto ditto ditto.
Scotch do.	30s. — 33s.	
Do. Oatmeal	27s. — 30s.	ditto of 140 lib.
Irish do.	27s. — 28s.	
Fine Flour	78s. — 80s.	p. sack of 280 lib.

Fifeshire Quarterly Report.

The weather, during the spring quarter, was remarkably favourable, being both dry and warm, which allowed the oat and barley seed to be finished under circumstances highly favourable to their after prosperity; and the sown grass, on the 25th May, was everywhere fit to be cut for the support of horses and cows. A good deal of it, indeed, is actually cut for that purpose.

On the 26th May the weather changed, and became remarkably cold and frosty, with snow upon the hills, which continued to the 31st, when the whole county was covered with snow, even to the sea-shore, some inches deep; the sown grass and wheat laid flat, and the trees, in full foliage, covered with it. To this a very heavy rain succeeded, which still continues, whereby an entire stop is put to working summer fallow and turnip land, until more favourable weather arrives.

The wheat has a good colour, and looks remarkably well; so that, if we are again favoured with dry and warm weather, an abundant crop, and an early harvest, may be expected. The quantity of potatoes planted is very great; and as they are not above ground, they have escaped being hurt by the frost and snow.

Of flax-seed there was so great a scarcity, that little comparatively is sown. Dutch seed sold as high as 4s. per lippie: what is sown is looking well, and may produce a sufficient quantity of seed to supply the country next year, if foreign importations are not made. Pasture grass has received a check from the cold weather, but will soon recover, if it changes to mild. Corn markets remain steady. Workmen's wages are also steady, work being plentiful.—*2d June.*

Morayshire Quarterly Report.

The farmers whose young cattle got turnip in stalls (a practice found by experience more profitable in this county than field-feeding), had them early off at good prices; while a continued demand has enabled others, with more inferior stock, and in worse condition, also to get clear-handed.—Spring-sowing has terminated under the most favourable circumstances. Oats, beans and barley make a fine appearance; so does wheat, on our friable and sandy soils; but, on the clays, it bears a most unpromising aspect, and cannot, with the best of weather, be two-thirds of an average crop.

Situate as this county is at a distance from the metropolis, and without that ready market which, in more populous districts, is to be

be found for every article of farm produce, it must afford pleasure, even to those who have no interest in them, to see the various improvements going on here. A contract for draining the Loch of Spynie, situated about the centre of this fertile district, has been entered into; and the work was begun in March last with 100 men, by whose labour (perhaps in 18 months) a thousand acres of land will be gained at an expense of about 10,000*l*. Good roads are making through the county; and packet-boats are immediately to be established betwixt the new harbour of Burghead and Little Ferry, in the county of Sutherland, by which an advantageous intercourse, hitherto unknown to the inhabitants of either sides of the Moray Frith, will be established; while travellers from the South, to or from Sutherland or Caithness, will, in place of passing four unpleasant ferries in open boats, have the comfort of a decked vessel, 40 tons burden, for themselves, their carriages and cattle, besides saving many miles of road.

Fortunately for farmers in this county, their wheat was sold and delivered at 40s. to 45s. per boll, previous to the late stagnation in prices; and the county does not now contain 500 bolls. A sufficiency of barley and oats, to meet the consumpt until next harvest, still remains: the former goes slowly off, at 35s. per boll; the latter at 28s. to 35s. per five firlots, as in quality. Oatmeal 2s. per peck of 9 lib. in retail. Hay 1s. per stone, 20 lib. Amsterdam, and in request; principally owing to the extra number of horses employed in dragging down from the woods to the shore considerable quantities of fir timber, which has now found a market, owing to political causes obvious to every person, and of which it may be well for all the proprietors of Scotch timber to avail themselves.—*2d June.*

East Lothian Quarterly Report.

The cold stormy weather which commenced in the end of March, and prevailed through April, was succeeded, in the second week of May, by weather of a different description; the effects of which were conspicuously displayed, by a rapid improvement in the appearance of all crops, especially those of wheat and clover. The change was so important, that every field almost immediately assumed the brightest aspect. But a strong check to their future prosperity took place in the end of the month, when frost, snow, stormy winds and heavy rains, followed each other so rapidly, as to threaten the severest injury to every kind of crop; and some instances of damage are already evident, though the extent of the whole is not to be calculated.

But the greatest apparent loss is upon the fields worked up for turnips, upon which much of the labour formerly given will be lost; whilst few of them, except those of a real turnip soil, can now be cultivated to advantage. Every field, however well dressed, must again be ploughed to bring it into proper tilth; and this retardment will necessarily cause all the ruta baga fields which were not sown, to be behind the proper season. Even the fields sown immediately before the rain, are so battered and hardened, that doubts may be

entertained whether the seed will ever spring into a plant. The delay caused in the cleaning of beans, will also be seriously felt by many people.

The Grain-market, the main support of this county, has undergone many changes through the quarter; but it is presumed that the lowest level for this season has now been reached, and that an advance of price, rather than a fall, must afterwards be looked for. Wheat remains in hand, much to the same extent as usual; but Oats are not a plentiful article; and almost every boll of beans and peas is in the hands of the dealers. At this time, decent Wheat is worth from 45s. to 50s.; Barley 28s. to 33s.; Oats 26s. to 32s.; Beans and Peas 27s. to 31s. It being now almost certain that the differences with America are not to be compromised, an import of wheat from that country, of any extent, may not be looked for. No doubt, several cargoes would be shipped, upon the faith that Mr Erskine's treaty would be ratified; but these can only be a sample of what otherwise might have been expected.

A general rot of common turnips in February and March caused the markets to be glutted for some weeks with fat cattle and sheep; but latterly, a demand has appeared, which fully exceeded the quantity presented. Prices for fat cattle have varied from 9s. to 11s. 6d. per stone of 17½ lib. avoirdupois, sink; and for Mutton, from 10s. to 13s. ditto. Good Lambs have not been scarce, much attention being now paid to the rearing of that article. Perhaps, in most instances, lambs have sold fully 10 *per cent.* higher than last year.

The potatoe land was planted in excellent condition, though it does not appear that more ground has been devoted to the culture of that valuable root than usual. In this county, the demand for potatoes is of a limited nature; hence an increase of growth would not be attended by beneficial consequences. Potatoes cannot be used to the same advantage as any of the varieties of turnip, as food for horses and cattle; so, of course, their cultivation in every county must necessarily depend upon the quantity required to supply the consumption of the people. Hay has generally sold at 18d. per Scotch stone, or 6*l.* 15s. per London load. Labour is not advancing in value, as was evident at the Dunbar hiring market on Tuesday last, where many servants were not engaged.—*June* 3*d.*

ENGLAND.

Northumberland Quarterly Report.

From the middle of February to the latter end of March, the weather was mostly fine, fresh, and dry; consequently very favourable for getting in the spring seed, and ploughing such lands as the severity of the winter had prevented. By the first week in March, all the lands, cleared of turnips and ruta baga, were sown with wheat; and, during the remainder of the month, the peas, beans and oats, were nearly all sown. The month of April was frosty, with repeated showers of snow, hail or sleet; but of such short duration as not to impede, in any great degree, the operations of husbandry; and

and the barley and clover seeds were, in general, got in before the conclusion of the month. This weather, so ungenial to vegetation, checked the growth of autumn sown wheat and clovers, which were uncommonly backward at the latter end of April; but the beginning of May, like that of last year, brought with it mildness and warmth, the consequence of which was, that every species of crop felt its beneficial influence; and vegetation proceeded with such rapidity, that its daily progress was very perceptible; and, at present, crops of every description are looking well; but this aspect may be soon changed, especially upon the dry lands, by a continuance of drought.

In last report, it was mentioned, that though common turnips were materially spoiled by frost, yet ruta baga remained uninjured. At that time it appeared so; but, in the months of March and April, it was found that the ruta baga had received material injury; for, though not rotten, like common turnip, yet it was spongy and juiceless, and deprived of its feeding qualities, as was proved by some sheep gaining no weight, which had their food cut and weighed daily for some weeks. This was not a solitary instance; for the same effect was experienced by many others besides myself. Khol-rabi seems to stand frost equally well with ruta baga, from the trials I have had for two years; but hares are so fond of it, that they did not leave a whole plant in an acre, by the beginning of January; and, from the great numbers in this neighbourhood, its culture will be necessarily abandoned.

The demand for ruta baga seed is this season unprecedented; not a fifth part of what is wanted can be supplied.

The last three weeks of dry weather has been extremely favourable for cleaning the turnip fallows upon dry light friable soils; but those of a stronger texture have gotten into a state of stubborn cloddyness, which nothing can reduce, unless a sufficiency of moisture is received. The produce of every species of grain is generally complained of; and there are very few corn-stacks remaining in the stackyards, even of the largest farms; and of those, most of them will produce little grain, a considerable portion of the injured wheat of last year being unthrashed.

From the failure of turnips, the market for fat was for several weeks overstocked, and the prices reduced; but, for the last three weeks, fat cattle have been sold from 8s. to 8s. 6d. per stone (of 14 lib.) sink, and sheep for 9d. per lib. sink.

The corn markets have been rather dull for some time past, probably owing to the hopes of importation from America.—*24th May.*

Letter from Wales, 26th May.

'We had a most favourable seed time, the whole month of March affording us just such weather as we could wish. At that time, there was the prospect of an early spring; but April gave a check to vegetation, which, till lately, has not been overcome. The weather, though cold, was not however too wet, consequently the growing crops were not so much injured as might have been expected; and,

as the month of May has been warm with gentle showers, fields at present look as well as ever I remember to have seen them.

'Corn markets have been stationary for this last quarter for good grain; and as for that of bad quality, it could not be sold at any price; so, most of it has been given to horses and pigs. Cattle of all kinds have sold well this spring, a great demand having prevailed from the east. Cows and calves, in particular, have been remarkably dear, as also ewes and lambs. Horses are in great request, and so are pigs. For some years past, large importations of the last article have been made from Ireland, by vessels coming to Newport and Cardiff for coals, which was rather against us; but, of late, few have arrived, which of course has raised the price. Nothing as yet can be said concerning the value of wool, although a great many flocks have been clipped. A great breadth of land has been planted with potatoes this season, as that root is becoming more and more a favourite with the lower classes of the people. Some ruta baga is sown, and great preparation is making for sowing an increased quantity of common turnip.'

Letter from Scarborough, May 26th.

'The other day I took a ride to Whitby, and thinking that a few remarks on the state of rural matters in the country betwixt the two places may not be disagreeable, I venture to offer them for insertion in the Farmer's Magazine.

'In the first place, it did not appear to me that what is properly called Agriculture was much attended to in the district which came under my observation. For the first six miles from Scarborough, almost the whole land is kept in grass, in which state it seems to have continued for a great length of time, though the slightest doubt need not be entertained of obtaining ample and rich crops of corn, were the plough to be introduced, and sufficient culture bestowed. But the previous question is, whether the tenants make more under this everlasting grazing system, than they could under the system of alternate tillage? and, under the circumstances of the case, I must suppose that the greatetst profit will be returned from the grazing system, especially in the neighbourhood of large towns. But, be this as it may, the grass which I saw was exceedingly rich, though the ridges of the several fields were extremely irregular, and of all sizes and dimensions. The small quantity of land in tillage appeared imperfectly cultivated; as an instance of which, several tenants were applying lime to fallows, which had not received the second furrow, and which were as full of quickens and other root weeds, as the soil could contain. Some potatoes were planted; but there seemed little ground preparing for turnips. Indeed, from the small extent of tillage land, that valuable root cannot be cultivated extensively.

'The ploughs at work appeared to be well constructed, and were drawn by two horses, though these were generally badly harnessed, and in poor condition. I should have mentioned that the enclosures are very bad, and that they are all formed by hedge and ditch.

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The stock depastured in them was a mixture of cows, bullocks, and sheep; and though the grass be of the richest quality, as already said, there does not seem to be much enterprize or action among the possessors.

'The next seven miles of the road is through a barren heath, altogether uncultivated; and, indeed, of a quality hardly capable of being cultivated with any advantage. The soil is a poor thin silly clay, destitute of every ingredient by which it can be converted to useful purposes. There are no enclosures, hardly any roads, at least none that are in a state of repair, or which afford evidence of having been repaired. In fact, this is the worst part of Yorkshire; worse, indeed, than the Highlands of Scotland, and of small advantage to those who are its proprietors.

'The remaining part of my journey was more agreeable, as the soil adjoining to Whitby is a sharp clever loam, and tolerably well cultivated. The grass system is adopted, but not so extensively as on the Scarborough side; whilst the enclosures are better, and the fields in a more regular shape. I only saw two small ricks of corn; but the hay ones are more numerous. Their way of building and cutting down hay ricks deserves to be admired; and, certainly, the English practice, in every thing respecting the management of hay, exceeds that of Scotland very considerably. There is little business going on at Whitby, and few ships in the harbour.

'There are two fairs at Scarborough in the year, one in May, and the other in November, for the sale of all kinds of live stock, and for hiring farm and house servants.'

Letter from a Farmer near Wakefield——May 27.

'The heavy falls of rain and snow during the winter months prevented field labour from going on till the latter end of February and beginning of March, when a favourable change of weather took place; and no interruption was given to work till the spring seed was completely finished, and that in an excellent style, except on a small portion of heavy land, sown with turnips, and ate in the wet season, which turned up very hard, and wrought unkindly. But the season, though dry, has been favourable; having little frost at night, whilst the mild rains, lately fallen, not only afford the prospect of a plentiful crop of hay, but have been highly beneficial to spring grain. At the end of February, wheat looked very bad indeed; and a good deal of land was sown again with spring corn. The seed being very thin and lean, and the weather uncommonly wet, it had not strength to root; and, in consequence, either perished by wet, or was thrown out by frost. Much, therefore, of the crop upon wet land is thin upon the ground, though greatly recovered by the late dry weather; and upon the whole, at present, promises to equal an average one.

'I was last week down in the East Riding, about 60 miles below Wakefield, and never saw their wheats more promising. Spring grain was only just out of the ground, and some newly sown. The present weather will be highly favourable for it.

Our markets are dull for all kinds of grain, and rather upon the decline, except for fine fresh thrashed wheat, which is not plentiful. There is a good deal of barley left in the corn merchants' hands, of an ordinary quality, which is getting very much out of condition; and of course will be fit for nothing but cattle, except the distilleries are allowed to work. Wheat is selling from 9s. to 13s. per bushel; oats, 3s. 6d. to 5s. per ditto; barley, 3s. 6d. to 5s. 6d.; beans, 7s. to 8s. per ditto. Our fat cattle markets are well supplied, though the price of choice beef and mutton is high, but expected to be lower. Beef, 8s. to 9s. 6d. per stone of 14 lib., sink offal; mutton, 7½d. to 8d. per lib., sink, without wool.

The season has been so very favourable for cleaning the fallows, that much of the land fit for turnips is clean, and ready for the reception of the seed. Indeed, some of the roota baga is already sown; but little of that sort is cultivated here. I give the preference to the turnip rooted cabbage, as it gives more time to get the land clean before planting. We sow the seed on a small patch, made clean and fine, about the 20th April, and plant out the ridges about the 20th June. They afford good food for early ewes and lambs in March, from the young shoots; and when these are ate off, the bottoms are superior to any other root I have yet found for feeding cattle. I gave my milk cows, as well as a few I fed for the butcher, common turnips till the end of February, then roota baga till 30th March, and lastly, turnip rooted cabbage, which served to the 12th May. The cattle fed much faster, and the cows yielded more butter on the last root than either of the former. I fear, however, I shall not succeed with them this year; the season having been so dry since the seed was sown, that the plants were almost all destroyed by the fly when in a seedling state; and those that remain are so weak, that I fear they will not be worth transplanting.'

Yorkshire Quarterly Report.

The weather, till of late, was rather too dry for the crops of spring sown grain; but being tolerably free from frost, with latterly a copious supply of rain, the fields will probably soon put on a more flourishing appearance. Oats, and beans in particular, are rather short and defective. The crops of barley in general look best, and cover the ground well. Not so the wheats, few of which have a full appearance; especially those after clover on strong soils. The report of the average prices of grain in Doncaster market yesterday, is, best wheat, 11s.; rye, 8s.; oats, 3s. 6d.; beans, 8s. 4d. per bushel of Winchester. The price of grain has recently declined considerably; attributable perhaps to some importations from America already arrived, and more expected. Large quantities of oats are arrived at Liverpool, &c. from Ireland and other parts. It is not supposed that much of any sort of grain is in the hands of merchants; but from apparent circumstances, it may be presumed, that any fear of scarcity is, for the present season, removed. Potatoes were, in the autumn and winter, much in demand and at a good price, but

but turned out in the spring very plentiful, and in some markets scarcely saleable at any price; at present they are worth about 2s. per bushel upheaped.

The stock of lambs is abundant; and fat and lean sheep sell well, though some decline in the price of fat cattle and sheep was felt at the last market at Wakefield. Lean cattle are at moderate prices. Cows for milk, and pigs, are unusually dear. Best beef, 7½d.; mutton, 8d.; veal, 7d.; and lamb, 9d. *per* lib. of 16 oz.

A sudden fall in the finer wools has proved a proper punishment for the greedy speculators; yet wool of all sorts is at better prices than formerly. Many sheep are already shorn. Flax is rather unpromising, as also meadow grass; yet old hay is plentiful. Good horses of all sorts are extravagantly high. The fallow ground is in a backward state, notwithstanding the remarkable fineness of the season for that work.—*May 29th.*

Lancashire Quarterly Report.

It is understood that very little corn is now in the hands of the growers, as their farms are small, and capitals of course not equal to speculations in the article. Last year's crop was pretty good. Prices of grain as follow; best Wheat, 63s. per load of 4½ Winchester bushels, or 280 lib.; Oats, 30s. per load of 7½ bushels; Beans, 32s. per load of 4½ bushels; Oatmeal, 46s. per load of 240 lib. In the spring, tares sold as high as 1*l.* per bushel, and grey peas 10s. per bushel. Potatoes imported from Scotland for seed, sold at 6s. per load of 224 lib.; but lately at 4s. per load. Best beef and mutton, 9d.; veal, 8d.; lamb, 10d.; and butter, 13d. per lib. avoirdupois; cheese, 70s. per cwt.

Fat cattle are very scarce. Lean stock looks generally well, notwithstanding the want of grass occasioned by the dry weather: they sold very high at most of the fairs, but are now rather lower. Very few sheep are kept in this part of the country; ewes with lamb, from various parts, are sometimes bought in at the latter end of the year, which are at tolerably good prices. Horses have kept steadily high in price for some time. Pigs also are dear.

Respecting the spring fallows; potatoes have been planted a week or two ago. Some farmers have also sown a few Swedish turnips; but those roots are cultivated here on a very small scale. Of rape or cole, little or none is grown. The growing wheats look so ill, that many farmers have harrowed barley in upon their wheat lands, though some crops sown after potatoes are very flourishing. Barley in general is only lately sown, and some still remains to be put into the ground, owing to the late seed time, so long prevalent in this county. The sowing of clover and other seeds, is managed in so slovenly a manner, that no satisfactory account can be given of them. Indeed many use no seeds at all; but, when the land will not grow corn, let it lye, and take no further care about it. The season was remarkably favourable for the sowing of oats, which are now doing very well since the rain, before which they were suffering

for want of moisture. The summer fallows in general, are in a backward state; for, though the weather has been fine, it is not the general custom to plough soon, and hardly ever, before winter; and the soil being light and hilly, is liable to be washed very much down the hills, during the rains of winter and spring.—Little or no flax is grown in this county.——*May* 29.

Norfolk Quarterly Report.

THE month of March produced remarkably fine weather, which afforded the farmer an opportunity of getting a great part of his Spring corn sown in a very good and husbandman-like manner, particularly on dry soils, where the turnip crop had been fed off early in the season. April, on the contrary, proved cold and wet; more unkind for barley-sowing on the strong lands than ever known. Very little business was done in the field that month, and that little not well done by any means, owing to the continued heavy falls of rain. May proved hot and dry, which greatly improved the growing wheats. At present, they promise a good crop, look healthy, and, excepting a small portion, are considered a full plant. The barley crop varies much in appearance; the part sown in March never looked better; and that sown in April, on the dry part of this district, looks extremely well: but a sad reverse, in the latter part, fell to the share of the heavy-land farmer. From intense wet they suddenly became intensely dry, on which account they are rough and cloddy. In such a state have they been sown, and in such a state do they remain, not having moisture sufficient for more than half the seed to vegetate. However, that part which comes under this description, fortunately, is not very extensive. Both peas and oats show a good healthy colour. Still, every description of corn, as well as grass, is considered, at this period, to be much in want of rain. The hay crop will certainly not be so abundant as last year. It had the appearance of being great, the latter part of April; but the severe drought of this month has shortened it much.

The grain markets have been declining in price for these three weeks past. Wheat has fallen from 5l. to 90s. per quarter; Fine Barley from 44s. to 34s.; ordinary quality scarce saleable at any price. Oats continue pretty steady in price; Peas seem without demand; Beans have fallen in price from 60s. to 50s. per quarter. Little variation in the value of butcher-meat since last report. Beef sells from 8d. to 9d. per lib.; Mutton, 7½d. to 8d.; Veal, 7d. to 8d.; and Pork 8d. to 9d. per lib. The crop of lambs this year is considered great. Store sheep are reckoned full 3s. in the pound cheaper than in March. Nothing has yet transpired about the price of wool. The principal part of the land intended for turnips is in a forward state of tillage.——*May* 29.

Essex Quarterly Report.

THE appearance of wheats are not quite so promising as in the early part of the season; and, at this time, they are getting light, from the dryness of the weather. On the good lands, there is still a fair prospect of a full crop; but the light and poorer soils have lost plant, and have a very unproductive appearance.

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The forward ſown barley, being chiefly on the ſtronger ſoils, has a very prolific appearance; but that which is after turnips, is ſuffering much for want of rain. From the inundated ſituation of the fens, a greater quantity of oats has been cultivated than uſual, which has much diminiſhed the quantity of barley. Oats, in general, are a full plant; and, notwithſtanding the dryneſs of the ſeaſon, are likely to produce an average crop. Peas and beans, at this time, look quite well; but a ſmaller quantity of peas has been ſown this ſeaſon, owing to the failure of the preceding crop, and being conſidered in this county as hazardous grain. Rye, in moſt places, has the appearance of being very productive. Tares, though in ſmall quantities, are very good. Turnip and rape ſeed look extremely well; and a larger breadth of the former is growing at this time, than known for ſome years paſt. Trefoil, clover and ſainfoin are not ſo good as was expected, owing to the want of ſufficient moiſture. Graſs, on the forward meadow land, is not more than a middling crop; on the poorer ſoils, it is very indifferent. The fallows, where the farmers have been active, are in a good ſtate; but, in many places, where they were in the leaſt neglected, (and which is the caſe on all heavy lands), they are in a backward ſituation, and very difficult to proceed with.

Flocks, in general, have had a good fall of lambs, which are in a thriving condition. Neat ſtock, that is, fat, is ſcarce, and ſelling at very high prices. Lean cattle are much in demand, and horſes of every deſcription are dear. The ſtock of wheat on hand, for the ſeaſon, is not plentiful; but, from its decreaſing price, a ſupply equal to the demand is generally at market. What barley there is on hand, is of inferior quality, the beſt being nearly conſumed by the maltſters. Oats, in our country markets, are not plentiful.—*May* 31.

Letter from London, 31ſt May.

'During the last quarter, corn of all kinds has arrived in great abundance from every quarter of the kingdom; and, of late, large importations, chiefly of oats, have been made from Holland. The political occurrences which have taken place, are very discouraging to the ſale of corn; and the varied regulations of Government have kept the business in a state of constant agitation and perplexity; indeed, the recent dilemma in American affairs is likely to prolong the difficulties of the trade.

'The general character of the harvest induced the expectation of much higher prices at this time; but it would appear, from the stocks still remaining in the hands of the growers, that the produce was rather underrated; though the reduction in prices is more to be ascribed to the political changes, than any apparent abundance at home.

'There are but few complaints upon the growing wheats, considering what a severe and varied season they have encountered. The oats and early sown barley look well; but, on some of the wet and stiff lands, where the sowing was backward, the plant wears a very sickly and unpromising appearance. The peas, in some districts, have already suffered from the insects; the beans look generally

pretty

pretty healthy, where they were well planted. The rains which fell in May, and the warm weather together, have brought forward the grass crops in a surprising manner; and in ten days hay-harvest will be pretty general around town.

Below are the prices at the Corn Exchange here, Monday 29th.

Wheat, English, White	84s. 86s. 88s.
——— Do. Red	75s. 80s. 85s.
——— North Country	75s. 80s.
——— Dantzic	80s. 82s.
Barley, Norfolk and Suffolk	32s. 38s.
——— North Country	25s. 28s. 30s.
Malt, Norfolk and Suffolk	72s. 74s. 76s.
Rapeseed, per last of 10 quarters	50s. 53s. 55s.
Rye	50s. 52s.
Beans, Small	52s. 54s. 58s.
———Large	44s. 47s.
Peas, Boiling White	70s. 75s. 80s.
—— Grey	46s. 50s.
Oats, Potato	32s. 35s.
—— Poland	30s. 32s. 33s.
—— Feed	25s. 27s. 29s.
Flour, English, per sack	70s. 75s.

Cumberland Quarterly Report.

Since laſt report, every kind of agricultural labour has been conducted without interruption; the whole amount of rain which has fallen from February 22d to May 22d being only 2.448. Vegetation has been much retarded in conſequence of ſevere eaſt winds, which prevailed during the whole of April. Wheat, in many parts of the county, is extremely bad: upwards of 100 acres have been reploughed and ſown with Lent grain; and a very conſiderable part is not half a crop. It is with great pleaſure I have to inform you, J. C. Curwen Eſq.'s wheat promiſes to be the beſt in the county. Almoſt the whole of his wheat is drilled. A few acres are ſown broadcaſt, with a view, I truſt, to caſt light upon the long conteſted queſtion, Whether is the Virgilian or Tullian ſyſtem to be preferred? The readers of the voluminous, and truly uſeful, works of Arthur Young, Eſq., muſt be aſtoniſhed at the number of contradictions to be met with on this ſubject; and the hearers of Dr Coventry muſt have their *anxiety* for a ſolution of this inquiry increaſed, when they find an admirer of the drill culture, (whoſe candour, impartiality, and love of truth, are equalled only by his extenſive and well-digeſted learning), in the concluſion of his lecture on this ſubject, adopting the language of academic ſuſpenſe, rather than of firm and undoubting confidence. Lent grain is generally more promiſing than it was laſt year. Potatoes look well. It is worthy of remark, that, in general, wheat ſown after potatoes this year, is ſuperior to that ſown on fallow. Wheat, 13s. per buſhel; oats, 4s. 3d.; barley, 5s. 6d. and 6s.; potatoes, 3d. per ſtone. Fat cattle, high; lean cattle ſomething higher than laſt year. Servants, men, 10l. to 13l. 13s.; women, 4l. 10s. for the half year. Inflammatory diſeaſes have prevailed much amongſt our horſes; and, in many

many cases, have assumed alarming appearances, and been attended with distressing consequences. Had it not been for the unusually dry weather, many farmers, who had their whole stock of horses in the disease, could not have accomplished their work.——1. *June.*

Extract of a private Letter from London, 2d June.

'I really see no prospect of wheat recovering what it has lost in price; though people seem to be getting over the panic which arose from the recent public measures. Oats have fallen 10s. lately; but unless the foreign supply is continued, they may get up a little, especially if we have that demand from your country which some people speak of. Although the growing barley is a good crop, and the stock of old, as well as of malt, small, I do not consider it likely, at this season, to rise; the more especially as it has been determined within these two days (after an investigation of near three months), to leave the distillery laws as they are for another season; and of course, there is little chance of distillation from grain being allowed, under existing circumstances.'

POSTSCRIPT TO SCOTISH INTELLIGENCE.

THE exhibition of models of a reaping machine took place on Thursday the 8th instant, before the Dalkeith Farming Society. Some months ago, that Society offered a premium for the best model of such a machine; also a further premium to the inventor, in case the implement, when constructed, answered the intended object in a suitable manner. Fifteen models, some of them highly ingenious, were in consequence submitted to the consideration of the Society, and minutely examined by a committee specially appointed. As the committee have not yet reported upon the merits of these models, it would be premature in us to give any opinion on the subject; but in next Number the report of the committee shall be noticed in the fullest manner.

When on this business, we cannot refrain from expressing our high sense of the liberal principles and judicious conduct adopted by this young, though thriving Society. Impressed with a strong conviction of the important benefit which would follow from obtaining a complete reaping machine, this Society wisely resolved to hold out rewards, sufficiently extensive, to rouse and bring into action the utmost efforts of mechanical genius. Instead of limiting their final premium to the paltry sums of five, ten, or even twenty guineas, as would have been done by some other respectable public bodies—they handsomely at once offered *Three Hundred Guineas* to the inventor of such a machine as should be capable of executing the important business of reaping. Had this meritorious and public-spirited Society existed when the thrashing machine was first invented, it is more than probable that the inventor would not have remained without patrons and protectors—would not have been left unrewarded by those whom he had so eminently benefited, or been suffered to glide through the vale of life unnoticed and neglected. What is past cannot now be fully amended; but, with submission, we recommend his case to the notice of the

the Dalkeith Society; and in particular, that they would take into consideration a letter in his favour, inserted in the First Branch of this Number. Should the business there mentioned be taken up by the members of that Society, we are almost confident the proposal of our respectable correspondent would meet with the most ample success.

A very large body of agriculturists, from different quarters, dined, on the above occasion, with the members of the Society, by whom they were entertained in the most elegant style. The preses, DAVID WIGHT, Esq., Ormiston, son to that well-known agriculturist, Andrew Wight, Esq. author of the original Scotish Surveys, discharged the duties of his office with much ability. He was supported by SIR JOHN HOPE, Baronet, and ALEXANDER KEITH, Esq., of Ravelstone; and the company (about one hundred and twenty in number) seemed animated with one common feeling, namely, an ardent desire to promote every object connected with British husbandry.

The island of St Helena at one period was dreadfully ravaged by field-mice, which attacked trees, grass, corn, and every kind of agricultural produce, and with the most ruinous consequences. At this moment there are some estates in the West Highlands of Scotland suffering in an alarming manner from the very same cause. If no check can be effectually put to these depredators, their rapid increase may be expected to be attended not only with destruction to the estates alluded to, but to the surrounding district. If any of our readers can suggest the mode of extirpating these vermin, practised in St Helena, or any other direct and effectual manner of doing so, they will confer a particular favour by communicating such information as early as possible.

NOTICES TO CORRESPONDENTS.

THE Draught and Description of a Reaping Machine are delayed till next Number; when we hope, from trials going forward, that something decisive may be given on that important subject.

It is out of our power, at this time, to present our Perthshire Correspondent's *Observations on the Communication of a Constant Reader*; but an early opportunity shall be taken to lay them before our readers.

The observations of a *Moralist* are under consideration; as are some papers on *Soapmakers' Waste Ashes.*

An Essay on Manure, signed *Glaucus*, shall not be neglected.

The Tweeddale Report, and several other articles, were too late.

No. XXXIX. will be published on Monday the 14th August; and our Reporters are respectfully requested to transmit the fullest account in their power, of the state of the crops, on or before the 2d of that month. The Conductor's reason for publishing in August, is to prevent the labour of arrangement from interfering with his harvest operations.

D. WILLISON, PRINTER, EDINBURGH.

LANARKSHIRE.

ESTATE of ROCHSOILES, in Lanarkshire, *TO BE SOLD, by Public Roup, within the Royal Exchange Coffee-House, Edinburgh, upon Wednesday the 25th October next, at 2 o'clock afternoon, unless disposed of by Private Bargain, of which due notice will be given.*

THE ESTATE of ROCHSOILES, conſiſting of about 900 Scots acres; of which, 709 are Arable, 109 Moſs capable of improvement, and 82 in Wood.

Theſe lands lye in the pariſh of New Monkland, thirty-two miles diſtant from Edinburgh, ten from Glaſgow, and one from the town of Airdrie, where there is a regular and well ſupplied market, and daily poſt; and ſix ſtages paſs through it, between Edinburgh and Glaſgow, every day, except Sunday.

The lands are in general of good quality, and capable of conſiderable improvement. They are divided into ſeven farms, and let to ſubſtantial and very punctual tenants, for nineteen years from Whitſunday 1805. There is a very good ſet of Houſes on each farm.

The eſtate abounds with Coal and Ironſtone of a ſuperior quality; which, from its contiguity to Glaſgow and Airdrie, are becoming daily more valuable, and may be ſo wrought as to be extremely productive. The line of the intended canal between Edinburgh and Glaſgow runs through the lands; which, when cut, which is ſuppoſed will be the caſe ſoon, will add immenſely to the value of the minerals.

There is a ſubſtantial and very convenient manſion, and a good ſet of offices on the premiſes, which may be entered to immediately; and 23 acres of land adjoining, at Martinmas next. The proprietor has the power of taking about 300 acres more into his own hand, beſide a certain quantity from each farm, for the purpoſe of feuing and planting, by making an allowance to the farmer, as ſpecified in his tack. A conſiderable part of the wood is old, and very valuable, and is all thriving remarkably well. L. 2000 or 3000l. may be got from thinning the wood; which will be of conſiderable benefit to the remainder, and do no injury to the appearance of the place. The lawn and approach to the houſe are laid out with great taſte; and, from the former, is an extenſive

tenſive and pictureſque view of Clydeſdale, the City of Glaſgow, and adjacent country. To a gentleman who wiſhes to ſet himſelf down in a place pleaſantly and healthfully ſituated, and completely made to his hand, this will be found a moſt deſirable purchaſe. The preſent proprietor bought it with the full intention of taking up his reſidence there; but, in conſequence of bad health, he is obliged to go to a ſouthern climate; and parts with it with great reluctance.

Part of the lands are retoured, and afford a freehold qualification in the county; are valued conſiderably above 400l. Scots; and the public burdens are moderate. A large proportion of the price will be allowed to lye in the purchaſer's hands, on proper ſecurity, for ſeveral years, and afterwards made payable by yearly inſtalments.

Should the Eſtate not ſell as a whole, it will be divided and ſold in Lots, the particulars of which will be given in a future advertiſement.

The title-deeds, a plan and rental of the Eſtate, and articles of roup, are in the hands of THOMAS ADAIR clerk to the ſignet, who will give any information that may be wanted, and is empowered to ſell the eſtate by private bargain.—JOHN MURRAY, the overſeer at Rochſoiles, will ſhow the houſes and lands, and give any local information that may be required.

HAY TO BE SOLD, AND GRASS PARK AND FARM TO BE LET.

There are to be SOLD, at the Farm of Croſswoodhill, ſeventeen Miles from Edinburgh, on the Road to Carnwath,—

SOME THOUSAND STONES OF MEADOW HAY, at 10d. per ſtone on the ground, or 1s. per ſtone if driven the length of Edinburgh. Alſo ſome hundred ſtones of RYE-GRASS HAY, at 1s. 3d. per ſtone on the ground, or 1s. 5d. per ſtone, if driven the length of Edinburgh.

Alſo, the ſaid FARM is TO BE LET. It conſiſts of about two hundred acres of arable land, moſtly well adapted for Turnips, and to be all encloſed this ſeaſon; and about a thouſand acres of Hill Paſture and Moſs, all drained and ſuitable for grazing black cattle or ſheep. It may be divided into two or more Farms if required.

A PARK, of about thirty acres, well watered, encloſed with ſtone walls, and having a Shed, will be let for grazing this ſeaſon

WIGTONSHIRE.

The ESTATE of BALSARROCH, lying within the Parish of Kirkcolm, WILL BE SOLD by Public Roup, within MRS TAYLOR'S *Inn, at Stranraer, on Friday the 15th day of September, 1809, at 2 o'Clock Afternoon.*

THE Estate lies within 8 miles of Stranraer, and consists of 521 Acres, or thereabouts, almost wholly arable, and of a strong fertile soil, capable of great improvement.

The Teinds are valued at 3*l.* 16*s.*, and the Proprietor of the Estate has right to them.

A considerable part of the price will be allowed to remain in the Purchaser's hands for several years, on proper security, and will be taken by instalments, if desired.

The titles and Articles of Sale may be seen on applying to THOMAS ADAIR, Clerk to the Signet, who will give any information that is wanted; and WILLIAM DOWNIE, tenant in Knocknean, in the immediate vicinity of the Estate, will show the grounds.

VALUABLE FARMS IN FIFE,

TO BE LET.

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